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ABSTRACT

The early literacy challenge in Indiana is to increase the literacy skills of students in Grades K-3 who are at risk for school failure. In 1997 the Indiana Department of Education began implementing the Early Literacy Intervention Grant Program (ELIGP)--close to half the ELIGP funding supported professional development for teachers and teacher trainers involved in Reading Recovery. The remaining schools had projects referred to in this impact study as Other Early Literacy Interventions (OELI). Examples of OELI projects funded included Four Blocks, Literacy Collaborative, Success for All, and other locally developed interventions. This impact study includes: a summary of the implementation study; an analysis of the impact of ELIGP, focusing on changes in early reading and literacy programs that resulted from ELIGP funding; an examination of a select group of case studies that illustrate the role of ELIGP in the school improvement process; an analysis of the impact of funding on the number of students completing Reading Recovery, special education referrals, and retention; and recommendations for enhancement of ongoing efforts to improve early reading and literacy in Indiana. Contains multiple tables of data and figures and 33 references. Appendices contain the survey instrument; outlined features of early literacy programs; lists of funded programs; summaries of early literacy intervention programs; policy news; and notes. (NKA)

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Indiana Education Policy Center

INDIANA'S EARLY LITERACY INTERVENTION GRANT PROGRAM

IMPACT STUDY FOR 1997-98

This report was prepared for the
Indiana Department of Education

By

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Ada Simmons
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David Gordon

Indiana Education Policy Center
Indiana University

December 1999

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This project was done in collaboration with teachers, coordinators, policymakers, and researchers throughout the state. Specifically, this collaboration included:

Indiana Department of Education: *Dr. Suellen Reed*, Indiana Superintendent of Public Instruction; *Terry Spradlin*, Legislative and Policy Analyst; *Earlene Holland*, Associate Director, Office of Program Development; *Phyllis Usher*, Assistant Superintendent; *Laura Taylor*, Education Consultant, School Finance; and the Prime Time Division.

Project Advisory Board: *Roger Farr*, Director, Center for Innovation in Assessment, Indiana University (IU); *Beth Greene*, Center for Innovation in Assessment, IU; *Leo Fay*, Professor Emeritus, IU; *Earlene Holland*, Associate Director, Office of Program Development, Indiana Department of Education; *Jack Humphrey*, Director, Middle Grades Reading Network, University of Evansville; *Marie McNelis*, Reading Specialist, MSV Washington Township Schools; and *Carl B. Smith*, Director, ERIC Clearinghouse on Reading, English, and Communication, IU.

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EXECUTIVE SUMMARY

I. Introduction

In 1997, under the leadership of Dr. Suellen Reed, Superintendent of Public Instruction, and with the support of the Indiana General Assembly, the Indiana Department of Education began implementing the Early Literacy Intervention Grant Program (ELIGP). Close to half of ELIGP funding supported professional development for teachers and teacher trainers involved in Reading Recovery®. The remaining schools had projects referred to in this study as Other Early Literacy Interventions (OELI)[1]. Examples of OELI projects funded included Four Blocks, Literacy Collaborative, Success for All, and many other locally developed interventions. This impact study includes:

- A summary of the implementation study (II below),
- An analysis of the impact of ELIGP, focusing on changes in early reading and literacy programs that resulted from ELIGP funding (III below),
- An examination of a select group of case studies that illustrate the role of ELIGP in the school improvement process (IV below), and
- An analysis of the impact of funding on the number of students completing Reading Recovery®, special education referrals, and retention (V below).
- Recommendations for enhancement of ongoing efforts to improve early reading and literacy in Indiana (VI below).

II. Meeting the Literacy Challenge

The *early literacy challenge in Indiana* is to increase the literacy skills of students in Grades K-3 who are at-risk for school failure. With an increase in literacy skills among this at-risk population of students, there will be a reduction in the percentage of students who require special education services, are retained, or fail to graduate. The ELIGP was designed to support schools in their efforts to develop early literacy programs that meet the needs of these students at-risk of school failure.

In 1997-98 ELIGP provided funds for new projects that served 262 elementary schools in approximately 107 school corporations and reached approximately 9,685 students. The initial study indicated that many schools had developed projects with a high prospect of improving educational outcomes.

The ELIGP implementation study developed a framework for assessing the impact of early reading and literacy interventions. Based on a survey of projects implemented by school corporations, it concluded that the ELIGP had funded projects that had a research base and a potential for improving early reading (St. John, et al., 1998). The current study applies this research framework to the study of change in schools receiving support through ELIGP in 1997-98.

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[1] Programs that focus on Kindergarten classrooms alone are referred to as OELI-K.

III. Impact on Early Reading and Literacy Programs

In January of 1999, the project team at Indiana Education Policy Center began a study of schools funded in the first year of ELIGP, 1997-98. Using the framework as a guide, the project team collected survey and case study data in order to develop a comprehensive view of the impact of ELIGP in its first funding year. Principals or their representatives completed the Early Literacy Intervention Survey developed for this project. The survey contained items related to the features and philosophies of schools' early literacy programs, as well as the number of students retained and referred for special education assessment. Using these data sources, a comprehensive analysis of the impact of ELIGP funding in 1997-98 was completed.

A. Indiana's Balanced Approach to Early Reading

This study used a stratified random sample of all of Indiana's elementary schools to assess the impact of ELIGP for 1997-98. The analysis reveals that the elementary schools in the state used a balanced approach to early reading and literacy. The common features for all schools included balanced approaches to organization and instruction, as well as a balanced classroom philosophy.

First, the average school used independent reading and small groups almost daily, as organizational strategies for teaching early reading. Small groups allow for systematic instruction, while independent reading builds on students' interests. This combination provides a balance that meets the learning needs of diverse learning styles.

Second, the average elementary school also used balanced approaches to reading instruction in Grades 1-3. Phonics and reading drills were used almost daily, indicating a systematic approach in teaching codes/phonemes. In addition, creative writing and emergent spelling were used daily, indicating a focus on individual understanding and development. A method valued in both the systematic and holistic philosophies, reading aloud, was also used almost daily.

Third, the instructional resources used daily in the average elementary school in Indiana also illustrate a balanced approach. Both trade books, a holistic literature-rich approach, and basal readers, a systematic approach, were used often to daily in Indiana's classrooms in Grades 1-3. Big Books, a holistic and literature-rich approach, and worksheets/workbooks, a systematic approach, were both used occasionally to often.

Further, school leaders responding to the survey also indicated that their schools had a balanced philosophy in the reading programs for Grades 1-3. The average respondent indicated a balance between a prescribed/systematic curriculum and a child centered/developmental curriculum. They also indicated a balance between emphasizing codes/phonemes and emphasizing meaning/comprehension. Thus classrooms had philosophical approaches that supported balance.

However, the typical school also emphasized a teacher-centered approach over a student-centered approach and teaching codes/phonemes outside of context more than within context. In combination, these dimensions of the philosophy of the average school had an explicit emphasis on teaching phonemes.

One focus of this study was the nature of and change in program features. ELIGP Schools were found to differ from Comparison Schools in many of their program features, especially those related to professional development and parent involvement. The major findings are summarized here.

B. Impact on Reading Programs

1. Program Features

An analysis of survey data revealed that ELIGP Schools were more likely than Comparison Schools to organize their classrooms with alternatives to whole class instruction, including ability grouping, child initiated learning centers, one-on-one tutoring, pullout instruction, small group instruction, and cooperative learning. ELIGP Schools reported more frequent use of trade books, Big Books, basal readers, systematic formative evaluation (e.g., performance assessment such as portfolios or running records), phonics, reading drills, creative writing, and drama. Although the differences were not statistically significant, there is evidence that ELIGP funding helped to create environments that facilitate the acquisition of reading skills.

2. Professional Development

The survey was also used to assess professional development related to literacy in schools. Results suggest a higher level of expertise available to teachers in ELIGP Schools. Both Reading Recovery® and OELI schools were more likely to have certified specialists teach in their schools or provide training to other teachers. Both Reading Recovery® and OELI program participants reported greater opportunities for networking and collaboration than Comparison Schools. Professional development was used more extensively in ELIGP than Comparison Schools, which suggests that the grant funding made this possible.

3. Parent Involvement

ELIGP Schools also reported a substantially greater degree of parent involvement in their programs. Reading Recovery® and OELI schools were more likely to distribute books to households with a low number of reading materials, include literacy instruction for parents, have parent-child reading programs, and more frequently utilize parent volunteers. ELIGP funding is serving to support parent involvement in school programs and maximizing student learning potential by supporting literacy practices at home.

4. Changes in Program Features

In addition to analyzing program differences among schools, the project team also examined the change in program features within schools after one year of ELIGP funding. For ELIGP Schools, the greatest change was an increase in the use of systematic formative evaluation, trade books, emergent spelling, creative writing, drama, and paired reading. This suggests that ELIGP funding contributed to a greater emphasis on developing early writing skills, reading fluency and comprehension, and in individualizing the curriculum through the constant evaluation of the progress of each student. Again, however, these changes were small and warrant further study.

IV. Case Studies of Alternative Approaches

In addition to the survey, the Policy Center developed three case studies of funded projects, as a means of building an understanding of the different ways literacy improvement has been supported through ELIGP funding. Schools were selected that had successfully implemented noteworthy models of literacy improvement. The case analyses provide a systematic analysis of the features of funded projects and are only briefly summarized below.

A. Four Blocks Method

The Four Blocks Method provides a comprehensive approach to classroom-wide literacy improvement within a school. The four "blocks" included in the method are phonics, basal instruction, "real books" (i.e., trade books), and writing. The Four Blocks model utilizes self-selected reading, teacher read aloud, teacher directed reading, working with words, working with spelling, working with a word wall, and the writing process to assist early readers.

The case study illustrates that the method complements the balanced approach currently being used in Indiana's elementary schools. However, the method does require change. Teachers commented that training was needed to introduce the method to all teachers in Grades 1-3 and to encourage their buy-in. The ELIGP funds provided a structure and process to gaining experience in the Four Blocks Method for this case study School.

B. Success For All

Success For All is a comprehensive approach to school-wide restructuring that has a strong confirmatory research base. This comprehensive approach requires a total commitment from teachers in the school. Success For All combines several different theories in its curriculum, drawing on whole language and phonics. It makes use of thematic curricular units and utilizes a variety of methods including storytelling, dramatization of literature, and phonics to assist students learning to read.

Teachers in the case study school described how they had spent a year studying the method before they decided to implement Success For All. They credited the buy-in process as having formed a commitment to the processes. Classroom observations illustrated full implementation of the comprehensive, cooperative instruction method in the early-reading program.

C. A Locally Developed Model (Kids' Place)

ELIGP also provided schools the option of developing locally designed interventions using research-based methods. This case study of the "Kids' Place" project illustrates the potential for improvement that can be created through local initiatives.

The Kids' Place project used a mixture of literacy methods with an emphasis on creating a systematic, phonics oriented, literature rich environment. A teacher in this school had the opportunity to attend training in the Literacy Collaborative approach at Ohio State two years before the option was available in Indiana. The case study illustrates how closely linked the local success of the project was to the leadership of this teacher. It also illustrates that the local adaptation of research-based methods, if carefully planned, can facilitate local improvement in early reading programs.

D. Building on Indiana's Balanced Approach

These case studies illustrate the importance of using comprehensive approaches to reading improvement, supported through professional development and consensual buy-in by all of the teachers in the schools. They also illustrate the importance of the emphasis on professional development that was evident in ELIGP in 1997-98. Thus, the

OELI projects appear to be enabling schools to strengthen the balanced approach to early reading and literacy in Indiana's elementary schools.

V. Changes in Student Outcomes

A second focus of the impact study was on changes in educational outcomes, including the number of students completing Reading Recovery® lessons, the percentage of students referred to special education, and the percentage of students retained in grade level.[2] Funding for Reading Recovery® increased the percentage of Grade 1 students completing this program in funded schools. ELIGP Schools were found to have lower rates of referrals for special education assessment. Retention rates were also lower, but these findings were less conclusive. A summary of major finding follows.

A. Students Completing Reading Recovery®

Reading Recovery® programs had already been underway before ELIGP funding in many schools. With the funding, the mean number of students completing Reading Recovery® increased by approximately 60 percent (from an average of approximately six to ten students per school). While all of these students were considered at-risk, participants reported approximately 72 percent completed the program successfully.

B. Referrals for Special Education Assessment

In general, respondents in both ELIGP and Comparison Schools reported higher rates of referrals for special education assessment in 1997-98 than in 1996-97. OELI programs had significantly lower rates of referral for special education assessment than Comparison Schools in the first year of funding. Regression analyses confirm that OELI funding was associated with lower referral rates.

C. Grade Retention

As a whole, ELIGP Schools were less likely to retain students than Comparison Schools. This difference, however, was not statistically significant. The schools with early literacy programs targeting Kindergarten students, OELI-K, had the lowest rates of retention. These differences approached statistical significance for this small number of schools.

D. A High Return Investment

In just one year of funding, the ELIGP appears to be contributing to the enrichment of literacy environments, professional development, and parent involvement in their children's education. The evidence indicates that ELIGP influenced reductions in referral for special education assessment and in retention in Grades K-3, although the latter is much less conclusive.

Reductions in student retention and special education referral (and eventually identification) translate directly to savings in state funding of education programs. The average state cost for serving students with learning disabilities ranges from $1,522-$2,577 a year[3], while each student retained in early primary grades cost the state and districts $4,387[4] in 1998-99. Students identified for special education have ongoing annual costs as well since these students usually stay in special education for many years. Thus, reductions in special education referrals provide cost savings for several years in the future. Overall, then, these interventions that reached out to all students in early primary grades resulted in direct cost savings to the state. These direct, within-year savings partially compensate for the direct costs of the program.

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[2] Many of the programs funded by ELIGP target students in Grades K-1 only. Reading Recovery®, for instance, is a program that focuses on students at-risk in Grade 1. Because students in Grade 1 will not take the ISTEP+ examination until the fall of 1999, it is premature to use ISTEP+ scores as indicators of program impact.

VI. Recommendations

Results of the implementation and impact studies, along with observations of developments in the application and award processes and implementation in local sites, provide a foundation for the following recommendations regarding the ongoing development of the ELIGP in Indiana:

- *Continue to identify research-based programs in order to guide schools seeking funding.* The IDOE has provided a vision and leadership in the identification and funding of research-based approaches to improving early reading and literacy programs in Indiana's elementary schools. These leadership efforts should be continued.

- *Expand the facilitation capacities of universities in Indiana to support early reading and literacy interventions.* The case studies illustrate that professional development and school-wide buy-in play a central role in the successful implementation of OELI projects. Local university support could enhance this opportunity in Indiana. The IDOE should facilitate dialogue among university schools of education in Indiana about the support of early literacy interventions through systematic professional development.

- *Continue to align selection and award processes for the ELIGP, especially for the OELI projects.* In the past two years the IDOE and the Policy Center have developed a series of documents that illuminate the features of early reading and literacy programs and provide guidance in the selection of these methods. Further, evaluation rubrics have been developed for the review of proposals for OELI funding that ensure selection of research-based projects, but that enable local flexibility. These efforts should be continued.

- *Encourage elementary schools to review their early reading and literacy programs and to refine their programs.* Preliminary evidence from this impact study indicates that ELIGP is improving reading opportunity through systematic improvement of early reading and literacy programs. Information on research-based approaches should be more widely disseminated in the state so that more schools use available federal, state, and local funding to make meaningful improvements in early reading and literacy programs.

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[3] Based on student count divided by State funding, 1994-95. Source: Indiana DOE Division of Special Education.

[4] Based on student funding formula. Source: Indiana DOE.

- *Integrate the emphasis on early reading and literacy into other ongoing reforms (e.g., Title I).* ELIGP is one of several state and federal programs that provide Indiana's elementary schools the opportunity to use professional development funding to make improvement in early reading and other programs. By disseminating information on research-based programs, the IDOE can encourage a broader dissemination of research-based approaches to reading improvement than would be possible if the information developed through ELIGP is limited to this single program. In addition, this systematic approach to early reading and literacy improvement might provide a model for an IDOE proposal for funding through the *Reading Excellence Act.*

- *Increase the emphasis on ongoing professional development for elementary teachers, focusing on improvement in early reading and literacy.* The case studies illustrate that comprehensive, ongoing professional development is essential to the successful enhancement of early reading programs. Greater collaboration among schools, universities, and the IDOE should be encouraged in the development of ongoing professional development opportunities.

- *Continue to conduct an annual survey of ELIGP and Comparison Schools.* The ELIGP has provided an opportunity for many of Indiana's schools to gain more experience with research-based approaches to literacy improvement. The greatest impact of the projects funded through the ELIGP will be felt over time and will depend on whether the features implemented through the program are sustained over time. Continuation of the survey can document impact on early reading and literacy programs and the ways program changes influence changes in literacy outcomes.

- *Encourage more site-based research to build a base of empirical data on program outcomes.* Many of the projects funded by ELIGP, such as the Literacy Collaborative and Four Blocks, were designed based on an understanding of the research, but lack a sufficient confirmatory research base. The IDOE should encourage site-based evaluations of the larger OELI projects and possibly even directly fund evaluation studies for selected projects. This will not only contribute to the creation of a confirmatory research base, but will help build an understanding of the local adaptation and implementation processes.

- *Conduct analyses of the effects of ELIGP on ISTEP+ Reading Achievement, using appropriate methods and controls.* Test scores are a central concern to legislators and the news media. By 1999-2000 there should be a sufficient number of Reading Recovery® students who were instructed by teachers trained by ELIGP to assess the effects of the program on reading scores of students in the lowest-achieving 20 percent (the target population for Reading Recovery®). Such analyses should be conducted using appropriate controls and statistical methods.

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CHAPTER I

INTRODUCTION

The Early Literacy Intervention Grant Program (ELIGP) was implemented in the 1997-98 school year as a means of improving the reading skills of young students at-risk for not developing adequate reading skills and to provide an opportunity for schools to restructure their early reading and literacy instruction. This ELIGP program was initiated by Dr. Suellen Reed, Superintendent of Public Instruction, with the support of the Indiana General Assembly. This program was an integral part of the 1997 Reading and Literacy for a Better Indiana.

The ELIGP supported professional development for training Reading Recovery® (RR) teachers and for the training of teacher trainers for this highly regarded program. In addition, ELIGP funded other Early Literacy Interventions (OELI), which were school initiated projects. The funded OELI projects intervened to improve early reading opportunities for children in Pre-Kindergarten, Kindergarten, and early primary grades. Both Reading Recovery® and OELI projects were funded in different locations across Indiana (see Fig. 1.1).

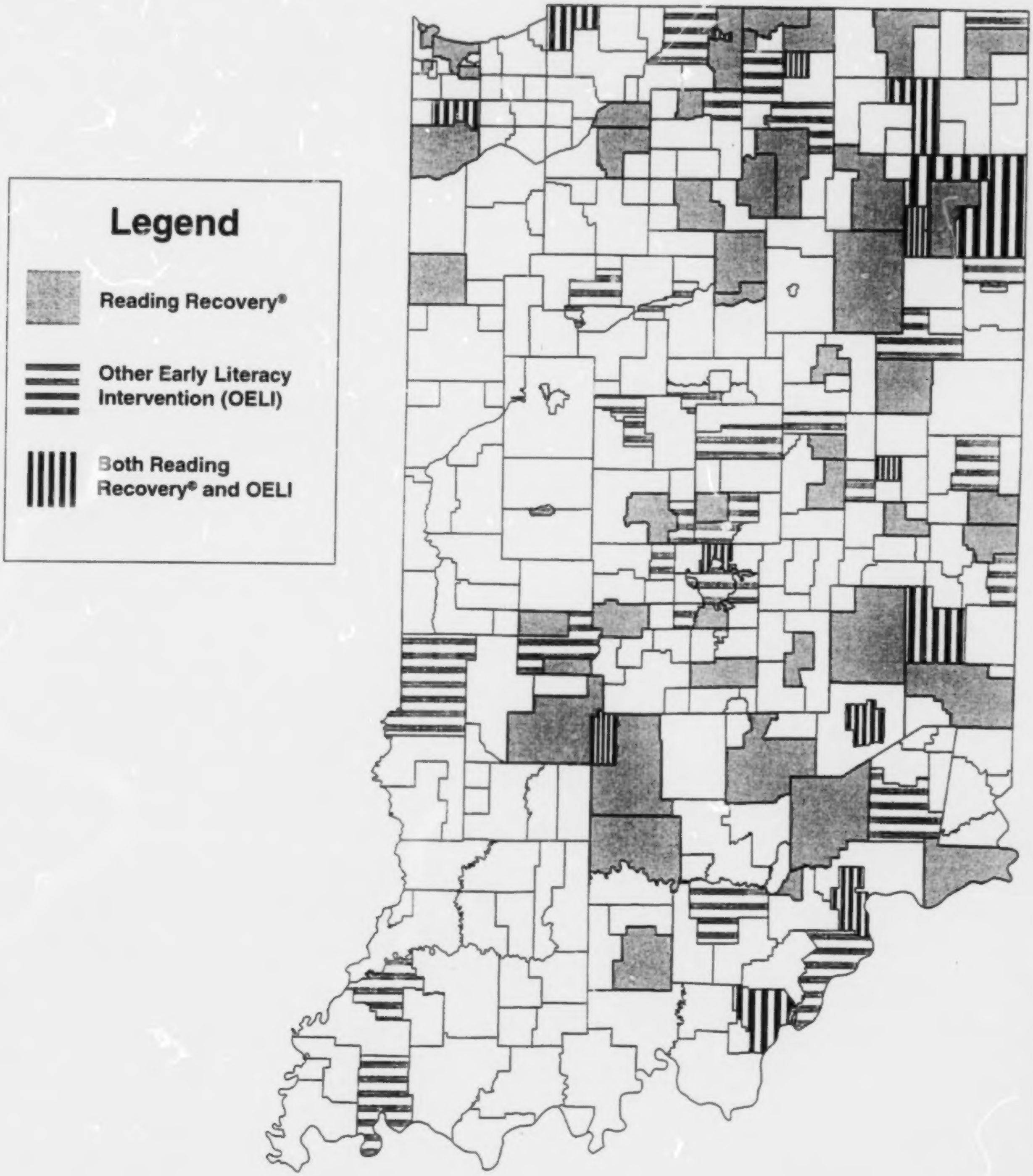
This report provides a summary of the Indiana Education Policy Center's study of the 1997-98 impact of ELIGP. The impact study includes an analysis of the changes in early literacy programs in Funded Schools, as well as an analysis of selected outcomes.

Indiana's Early Literacy Challenge

The goals of the Early Literacy Grant Program are to increase the literacy skills and reading abilities of all students in Grades K-3 and to reduce the number of children who are at risk of not learning to read by the end of Grade 3. The funded projects attempt to achieve this goal by enhancing the early reading opportunities for children in Pre-Kindergarten programs, Kindergarten programs, and early primary programs. A diverse array of projects were funded. Many, like Reading Recovery®, focused on professional development. Others focused on providing literature resources for children and families. Almost all of the funded projects enhanced the instructional opportunities offered children. Because a major aim of this program was to enhance literacy and reading instruction, we developed a framework for assessing the impact of early literacy programs (see Chapter II) and used this framework as a basis for a survey of Funded and Comparison Schools.

There are two possible ways to measure the student outcome of ELIGP early literacy interventions. One possible measure, improving achievement on reading tests,

Figure 1.1 Location of ELIGP Projects 1997-98


Legend
Reading Recovery®
Other Early Literacy Intervention (OELI)
Both Reading Recovery® and OELI

relates to the current policy focus on educational excellence. The second, reducing the numbers of students who are retained in grade level and/or are referred to special education services, relates to the social goal of equalizing opportunity and the broader economic goal of having an educated labor force.

As a state, Indiana ranks high in early reading achievement. In the 1992 and 1994 National Assessment of Educational Progress (NAEP) reports, the two in which Indiana participated, the state ranked substantially higher than the national and regional average in Grade 4 reading achievement (Mullis, Campbell, & Farstrup, 1992; U. S. Department of Education, 1994). Both years, Indiana students in every subgroup (broken down by race/ethnicity, gender, and levels of parental education) ranked among the leading states. It should also be noted that Indiana did not have a sample group large enough to be included in the 1998 survey. Therefore, while available evidence indicates that Indiana ranked high nationally on Grade 4 reading in the early 1990s, there is no confirmatory evidence that these trends held in the late 1990s. If the state continued to rank high nationally on norm referenced tests, then it may be difficult to substantially raise average scores relative to the national norm.

Regardless of whether the state as a whole ranks high on reading achievement tests, there is still reason to intervene to improve reading opportunities for students who are in the lowest 20 percent on reading achievement, i.e., students who are having difficulty learning to read. For example, Reading Recovery® was designed to intervene and improve reading levels of students in the lowest 20 percent of their Grade 1 class. Therefore, if Reading Recovery® programs meet the goal of serving 20 percent of Grade 1 students in a school, it may be appropriate to assess the effects of the program on change in Grade 3 reading scores for this group, two years later. However, since 1997-98 program funds served only teacher training and each teacher in training served five or fewer students, it will be at least another two years before it would be appropriate to use test scores to assess the impact of Reading Recovery®. For OELI schools, it would seem appropriate to examine the effects of funding on test scores, especially for children in the lowest 20 percent. However, such analyses need to be carefully constructed to examine the effects on students who actually received services.

The second set of possible indicators for meeting the reading challenge—the percentages of students retained in early primary grades and referred for special education assessment—provides appropriate measures for assessing the impact of ELIGP. Indiana has a growing number of students with special learning needs. Between 1987-88 and 1995-96, the number of students who were identified as having learning disabilities increased by 23 percent, as did the average for the 50 states, the District of

Columbia, and Puerto Rico (U. S. Department of Education, 1997). In addition, while the percentage of students retained in Indiana schools has changed very little this decade (St. John, et al., 1998), retention in early primary grades is more substantial and relates more directly to reading ability. Thus, reductions in the percentages of students referred to (and/or identified for) special education and who are retained in early primary grades represent an important outcome for Indiana education.

Further, if early reading interventions could reduce special education referrals (and identification) and retention in early primary grades, there would be substantial benefits to taxpayers. Students retained not only add an extra year of educational costs for students who complete public education, but also increase the probability of drop out. Students who are identified for special education services usually require several years of service, which come at a high direct cost. In addition, students who have been retained and/or received special education services are more likely to drop out and less likely to attend college. Thus, reduction in special education referral (and identification) and retention in early primary grades represent important indicators of impact for the ELIGP.

There are, however, some differences between the Reading Recovery® and OELI portions of the program. Some Funded Schools had implemented the Reading Recovery® program a year or two before ELIGP was implemented. The effects of 1997-98 funding may not be possible to evaluate until the newly trained teachers have begun to use their new knowledge and skills in practice. Nevertheless, the Reading Recovery® teachers in training did work with a few students during 1997-98, so it is possible to assess whether their efforts reduced the rates of retention or referral to special education. However, in future years the training provided in 1997-98 could continue to have an impact and a multi-year study would be needed to evaluate these outcomes.

School corporations funded under OELI generally offered services to large numbers of students in Grades K-3 in 1997-98 and, in some instances, to their families. Further, the OELI projects tend to be class-wide interventions rather than pullout programs. Thus, while the actual types of projects undertaken were diverse, they generally provided more classroom direct services and reached more students. Therefore, it is appropriate to assess the effects of OELI projects on rates of special education referral and retention in 1997-98.

A comparison of the schools funded by the Reading Recovery® and OELI components of the ELIGP provides a chance to learn about the impact of two different funding strategies. While Reading Recovery® is both systematic and uniform across the Funded Schools, OELI projects were locally selected interventions that used different designs. Similarly, while the Reading Recovery® program reaches a small number of students identified as having early problems learning to read, the interventions funded by the OELI portion of the program tended to reach all students in more inclusive environments. Thus, it is appropriate to assess the effects of funding both types of projects on the early reading programs as well as on referral and retention rates in Indiana's elementary schools, while recognizing that it could take a few more years for Reading Recovery® to have a measurable impact.

Study Approach

As part of the implementation study conducted by the Indiana Education Policy Center, a range of possible approaches to assessing the effects of ELIGP were examined (St. John, et al., 1998). Tracking students who received services or establishing experimental studies with treatment and control schools are scientifically sound approaches, but are costly and do not yield timely results. Indeed, such studies can take several years to conduct. Instead, we recommended a survey of Funded and Comparison Schools, supplemented by analyses of IDOE databases, as a less costly and more timely approach to assessing the impact of the program. We assessed the effects of the new funds on schools rather than on individual students.

The Early Literacy Intervention Survey (Appendix A) was developed by the Indiana Education Policy Center to both assess the effects of ELIGP funding on the early literacy programs and on selected program outcomes. Using a new conceptual framework for assessing early literacy interventions (see Chapter II and St. John, et. al., 1998), the project team developed a comprehensive assessment instrument. The features of a range of early literacy interventions were identified, based on a detailed reading of the literature (see Appendix B). Then, the features were integrated into a survey instrument (Appendix A) that was sent to both Funded Schools and a representative sample of Comparison Schools. The survey results provide a comprehensive and representative sample of all elementary schools in Indiana.

The survey was sent to 262 schools that had received support through ELIGP in 1997-98 and a random sample of 351 elementary Comparison Schools that had not applied for or received funding (Table 1.1). A total of 167 Funded Schools responded to the survey for a response rate of 64 percent (Table 1.2). A total of 182 Comparison Schools responded for a response rate of 52 percent. A response rate of over 50 percent is generally considered an appropriate representation in survey research. Thus, there is reason to expect these responses are representative of the schools in the state of Indiana.

Before reading about the survey results, it is important that readers understand there were differences among the schools that participated in the ELIGP. One of the

Table 1.1 Funded and Comparison Schools as a Percentage of Public, Elementary Schools in the State, 1997-98

	Funded	Comparison	Funded + Comparison
Count	262	351	613
Percent of public, elementary schools	20.42	27.36	47.78
Elementary schools			1283

Table 1.2 Number and Response Rate of Surveyed Schools

Type	Funded	Comparison
Surveyed	262	351
Responded	167	182
Rate	64%	52%

strongest predictors of student reading achievement is poverty, and schools in urban and rural areas have higher rates of poverty (Snow, et al., 1998). There is a great deal of difference among the ELIGP Funded Schools, as is measured by percent of students receiving free lunch (Table 1.3). Among the Reading Recovery® schools included in this study provide that an average of about 34 percent of the students were on free lunch (33.4 percent in fall 1996 and 34 percent in fall 1998). In contrast, the Comparison Schools had about 28 percent on free lunch (28.1 percent in 1996 and 28.8 percent in 1998). At the other extreme, schools with OELI projects serving students in Grades 1 to 3 had about 24 percent on free lunch in 1996 and 1998. Further, in 1997 these same schools had only 19 percent of their students on free lunch. These differences are statistically significant, meaning that schools with a higher percentage of poor students were funded through Reading Recovery® while schools that had lower poverty rates proposed OELI projects for Grades 1 to 3. It should further be noted that about one-quarter of the OELI schools received funding for Kindergarten projects (OELI-K). In this study, they are referred to as OELI-K projects. These schools had higher percentages of students with free lunch than the other two groups. This difference was a significantly higher percentage in 1996[5].

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[5] Because of the low number of OELI schools that had Kindergarten projects, they are less likely to differ significantly from the mean since significance tests are based on the number of schools.

Table 1.3 Percent of Students in School Receiving Free Lunch by Program Type

	1996	1997	1998
Reading Recovery®			
Number	139	140	134
Mean	33.42**	33.5	33.39
Standard Deviation	19.95	19.05	19.64
OELI Grades 1-3			
Number	105	107	103
Mean	23.64	18.99**	24.14*
Standard Deviation	2.4447	1.83	18.29
OELI-Kindergarten			
Number	33	32	31
Mean	35.89*	35.58	35.11
Standard Deviation	17.08	16.02	17.35
Comparison Schools			
Number	344	345	342
Mean	28.12	27.92	28.81
Standard Deviation	21.39	20.66	21.40

* Significant at .05
**Significant at .01
Indicates significance level of mean differences compared to Comparison Schools

The Policy Center used two general types of statistical methods in the impact study: descriptive statistics and regression analysis. First, descriptive statistics were used to compare the features of early literacy programs in Indiana's Funded Schools to those of Comparison Schools that were not funded by ELIGP. This analysis helped to discern the overall approach to literacy education used in Indiana, as well as the extent of change in student outcomes. Descriptive statistics were also used to describe change in student outcomes and significance tests were used to determine when differences were meaningful. The means for all ELIGP schools were compared to those of Comparison Schools; in addition, the means for both Reading Recovery® and OELI schools were compared to Comparison Schools. Second, multiple regression analyses were used to assess whether the intervention project influenced these statistical differences, controlling for the effects of historical test scores and the SES composition of the school. Statistical controls were necessary to discern whether the differences observed in outcomes were attributable to the program funding.

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Organization of the Report

The report has six chapters addressing key aspects of the literacy challenge in Indiana. This chapter described the study within the context of Indiana's Early Literacy Challenge. Chapter II provides an analysis of the programs implemented in school corporations, summarizing the Policy Center's 1998 implementation study. The chapter summarizes information on funding for 1997-98, presents the conceptual framework used in both the implementation and impact of both studies, and summarizes the key findings from the implementation study. In addition, Chapter II summarizes the ongoing development of the ELIGP. It presents the recommendations made by the Policy Center as part of the implementation study and summarizes the steps taken by the IDOE in its efforts to refine the ELIGP.

Chapter III provides an analysis of the program features of Funded and Comparison Schools. It presents an overview of the implemented philosophies, parent involvement, professional development, instructional programs, and organizational approaches to reading in both Funded and Comparison Schools. This provides a comprehensive overview of early reading and literacy programs in Indiana's elementary schools. In addition, the chapter provides an analysis of changes in instructional and organizational features in early literacy programs. (See Appendix B for a full description of the features studied and examples of the types of interventions in which the features were included.)

Chapter IV presents case studies based on site visits to three schools conducted in 1997-98. Interviews conducted and observation field notes recorded during the site visits are used to describe the features of the early reading and literacy programs that were implemented.

Chapter V provides an assessment of the impact of the ELIGP on reductions in referrals for special education and retention. This analysis includes descriptive comparisons and multiple regressions that control for the effects of poverty. One limitation of the analysis is that Reading Recovery® was used primarily for training new teachers rather than to provide direct service.

Finally, Chapter VI presents recommendations for ongoing program development and further assessment of the impact of the ELIGP.

CHAPTER II

PROGRAM IMPLEMENTATION

In 1997-98, the Indiana Department of Education implemented the Early Literacy Intervention Grant Program (ELIGP) to better meet the state's early literacy challenge. As part of the implementation study, the Indiana Education Policy Center (St. John, et al., 1998) conducted a comprehensive implementation study. This chapter summarizes key aspects of the earlier study:

- *Overview of the 1997-98 Program*
- *Framework for the Study of Early Literacy Intervention*
- *Implementation Findings*
- *A Strategy for Program Development*

Overview of 1997-98 Program

Funding was provided for schools to "develop literacy programs, such as Reading Recovery®, to meet the needs of primary students and to ensure that their reading skills are advancing to a proficient level" (Reed, 1996, p. 2). Thus, a critical literacy challenge is to enable more students to attain sufficient reading skills by the end of Grade 3 so that they are able to read and comprehend the texts included in the normal school curriculum.

ELIGP provided funds to corporations across the state for training Reading Recovery® teachers and for other locally-developed interventions. Below we provide an overview of the funded corporations along with the goals and limitations of the evaluation.

A substantial portion of the funding under the IDOE Early Literacy Intervention Grant Program went to schools for funding the training of Reading Recovery® teachers. The funds for Reading Recovery®, approximately $1.7 million, were allocated for the training of 184 teachers in 70 corporations and for the training of ten new Reading Recovery® teacher trainers (Table 2.1). These funds directly benefited 140 schools in which opportunities for students to meet the literacy challenge were increased by the presence of new Reading Recovery® teachers.

In addition, 54 school corporations representing 63 projects (including the Literacy Collaborative [LC] and Full-Day Kindergarten [FDK] Projects) received funding for Other Early Literacy Intervention (OELI) projects[6]. For the 1997-98 school

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[6] For the purpose of analysis, the OELI projects were regrouped into those that focused on Grades 1 to 3 (OELI) and those that focused only on Kindergarten (OELI-K).

Table 2.1 Grant Amounts and Number of Projects

PROGRAM TYPE	AMOUNT STATE $[2]	CORPORATIONS WITH	SCHOOLS WITH	ESTIMATED STUDENTS[4]
Reading Recovery® trainers[1]	596,482	10	NA	NA
Reading Recovery®	$1,104,000	70	140	1855[3]
Other (includes LC and FDK[5])	1,662,335	54	142	7830
Totals	2,766,335	107	262	9685

Notes:

[1] The $596,482 for the training of ten new Reading Recovery® trainers (teacher leaders) was allocated directly to Purdue University, rather than to the school corporations.

[2] The state funding is derived from information provided with the approved applications, rather than from surveys.

[3] The number of Reading Recovery® teachers trained this year was 184. Reading Recovery® teachers in training do not serve as many students as do fully trained teachers (at 8 students/year, 184 fully trained teachers serve about 1,472 students). A teacher in training might serve half that number of students (736). To be generous, we assumed 6 students per teacher, which yields 1,104. One question on the survey asks respondents to indicate the expected number of students served. The sum for the 50 Reading Recovery® surveys is 1,501 students served by 125 teachers, or 12 students reported served by Reading Recovery® teachers. This is twice the number of students usually said to be served by a teacher while in the training year.

[4] The estimated number of students is derived from estimates provided in the survey responses for corporations that completed surveys and from the estimates in the applications for corporations that did not return the surveys.

[5] FDK = Full-Day Kindergarten.

Source: Early Literacy Intervention Grant Program Survey, 1998. See Appendix D.

year, virtually all of the school corporations that proposed projects were funded for at least part of the proposed project, together receiving about half of the funding ($1.66 million).

The targeting of funds during the 1997-98 school year was constrained by the timing of the legislature's funding of the program. The budget for the program was not passed until June of 1997. Consequently, there was little time to inform schools about the program in advance of the 1997-98 school year. School corporations had less than two months to respond to requests for proposals and to implement their programs. However, in the second year of the Early Literacy Intervention Grant Program, there was more time for schools to plan for the program and, consequently there was more extensive demand for the program.

An estimated 9,685 students were served by ELIGP in the 1997-98 school year (Table 2.1).[7] This included 1,855 for Reading Recovery® sites and 7,830 for the other early intervention projects. In addition, most of the 184 teachers trained by Reading Recovery® in the 1997-98 school year will continue to serve additional students in future years, and the ten new trainers (teacher leaders) will expand the capacity for providing Reading Recovery® training in the state.

Framework for the Study of Early Literacy Interventions

The National Research Council had a study (i.e Snow, et al., 1998) underway that addressed some of the same questions that concerned us. Had we known of their study, it would still have been necessary to develop a new framework as illustrated by two specific limitations of this seminal review.[8]

First, in their review of the research, Snow et al. (1998) acknowledged that different researchers use different types of instruments to measure literacy outcomes, but they do not reflect critically about the implications that flow logically from the choice of a particular instrument. For example, they reviewed a study by Iversen and Tunmer (1993) that integrated phonologic decoding into the Reading Recovery® program and used an instrument that measures this form of decoding skill (the Dolch Word Recognition Test) to evaluate the results in comparison to the regular Reading Recovery® method. Snow et al. (1998) used this study to argue that there are some serious limitations to Reading Recovery®. We reached a slightly different conclusion about the implications of the Iversen and Tunmer study, because we recognize that different tests measure different literacy related outcomes. Thus, it is important that a framework that attempts to identify effective literacy improvement strategies not only include critical thinking about the methods and instruments used to measure student outcomes, but also include critical reflection about the relative importance of different types of literacy outcomes.

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[7] The number of students served was estimated from a survey returned by 100 corporations and the estimate in the original proposal for corporations that did not return the survey.

[8] We consider it fortunate that the Snow et al. (1998) study was completed in time to have an influence on this report. Indeed, we think our efforts build on insights reached in the Snow et al. review.

Second, Snow et al. (1998) did not explicitly consider the features of different types of early literacy interventions. As with some other recent meta-reviews (Talley & Martinez, 1998; Northwest Regional Education Laboratory, 1998), Snow et al. included a review of research on major interventions, such as Reading Recovery® and Success For All. However, they did not examine specific aspects, or features, of these programs and how these features linked to literacy outcomes. Had we used this approach for the current project, we could not examine specific aspects of programs, because local schools and corporations had discretion over which types of program features they included in their interventions. They could mix-and-match features to address local needs, as well as implement a predefined package or methodology. Therefore, we needed to investigate the nature of specific program features and how they might link to specific program outcomes.

Thus, in the current study we developed a new analytic framework for assessing literacy interventions. This framework provides a meta-structure for assessing the linkages between the specific features of literacy interventions and specific literacy outcomes. A summary of the framework is presented in four parts: (a) literacy outcomes, (b) program features, (c) research base, and (d) costs and effects.

Literacy Outcomes

When examining the effects of a wide range of literacy interventions, it is important to recognize that different types of literacy interventions focus on different types of outcomes. We identify four specific outcomes that are the focus of various types of literacy interventions.

Emergent Literacy (or Reading Readiness)

Emergent literacy includes linguistic knowledge (e.g., grammar, oral comprehension, phonological awareness) and conceptual knowledge (e.g., symbols and representation, concepts about print) that are central to reading. Emergent literacy is an indicator of whether the child is ready to learn to read. Historically, it has been treated as an outcome of kindergarten, and appropriately so. Acquisition of emergent literacy skill is related to children's development (Vygotsky, 1978), their awareness of concepts and meanings, and their ability to relate meanings to linguistic symbols.

Decoding

Historically, the concept of decoding was defined by many advocates of direct instruction as "phonologic decoding"[9] (Snow et al., 1998, p. 52). This approach to decoding focuses on phonological aspects of language—rhyme, alliteration, phonemic sequences, and so forth—as techniques for decoding written language into oral and vice versa. Research generally shows that this form of decoding, what we call *Decoding A*, is the best predictor of later reading success (e.g., Foorman, 1995, who cites 16 studies supporting this conclusion).

A second kind of decoding, which we refer to as *Decoding B,* emphasized the whole language paradigm. It not only includes the basic concepts embedded in Decoding A, but also emphasizes understanding the meanings associated with language. Thus, Decoding B links more directly to comprehension than does Decoding A and could explain why some students might be able to decode—and indeed, may even be able to read a text out loud—but not be able to comprehend the text. Marie Clay (1979, 1991, 1993), the founder of Reading Recovery®, is one example of a researcher who emphasized Decoding B.[10]

Basic Comprehension

At the Kindergarten level, basic comprehension refers to sentence-level comprehension. Typically, children are given a four-sentence passage and asked questions to test whether they understand the literal meaning of the sentence. This basic understanding, then, would seem to be the minimum foundation for comprehending across subjects.

In the direct instruction model of literacy, comprehension is separated from decoding (Decoding A) and measured separately. In the whole language paradigm (Smith & Goodman, 1971; Tierney, Readence, & Dishner, 1995; Weaver, 1994), including Reading Recovery® (Clay, 1991), the acquisition of decoding is more directly linked to comprehension, which explains how this community of interest generated a conception of decoding that included this cognitive linking structure (Decoding B).

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[9] Snow et al. (1998) carry forward this notion of decoding without reflecting on the possibility of an alternative definition. We think this limitation of their review method partially explains their criticisms of Reading Recovery®. The research team is expanding this framework as a part of a systematic review of research on selected early intervention programs.

[10] The reader is reminded of the Iversen and Tunmer (1993) finding about modifying Reading Recovery® to enhance learning of Decoding A skills. Students who acquire decoding skills could still have trouble comprehending. The use of an instrument that measured decoding to assess the effects of Reading Recovery® could miss the specified intent of the program.

Critical Literacy (or Critical Thinking)

Understood in the most rudimentary terms—appropriate for the early primary age group—critical literacy refers to the ability to place oneself in relation to a text, to see the text as a communication which allows for and even requires some kind of interpretive response to its content. Some proponents of whole language argue that it is critical for literacy instructors actually to motivate readers to do the substantial work required to decode (Tuman, 1987; Wilson, 1986). However, regardless of the particular beliefs or school-of-thought that each advocates, most literacy experts agree that critical thinking is an important component of literacy, and the majority of literacy tests used in Grades 3 and 4 include this type of critical thinking skill as one of the "higher order" skills measured on the test.

Understanding Literacy Outcomes (and Measurement Instruments)

When reviewing literature on literacy, it is important to understand that reading comprises a complex set of skills—decoding, comprehension, and critical literacy—and items that test these skills are included in most standardized tests of literacy and intelligence. Emergent literacy represents a requisite ability that is influenced by developmental processes, as well as by literacy instruction.

Further, when trying to determine whether a specific program feature has a *research base* it is important to note what type of outcome the intervention is intended to influence. Very often researchers and program advocates[11] select outcome measures that relate to a specific outcome, such as Decoding A or emergent literacy. Other studies use more general measures of literacy achievement, such as standardized tests, that incorporate several items to test skills related to each of these outcomes.

Program Features

Program features are the specific components of literacy interventions that are thought to influence literacy outcomes. In our reviews, we have found that different types of features link to different types of literacy outcomes. Therefore, it is important to examine the types of program features included in a program, as well as the program effects.

When we started the literature review we began to pay attention to program features because we knew intuitively that the early literacy interventions funded as Other Early Literacy Interventions (OELI) might combine diverse program features, mixing and matching features of various programs in a locally constructed project. We realized it is important to pay attention to the role of various program features. As a result of the review we developed a classification framework of program features (organizational/structural, theoretical/philosophical, instructional, professional development, and parent involvement), and then conceptualized a model of how these components might work together in the literacy improvement process. A full list of program features that were identified in the literature is included in Appendix B. The categories of program features and the model are described briefly.

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[11] In educational research, the advocates of programs are frequently the contributors of research on the programs (e.g., Slavin & Madden, 1990).

Structural/Organizational

Most interventions are organized—or structured—into a coherent whole. The structure consists of specific features, such as the use of one-on-one or whole class instruction, and the use of certain materials, such as basal readers. These structural features essentially define how the intervention is delivered to the student. (See Appendix B for a list of organizational and structural features derived from the literature.)

Theoretical/Philosophical

Most literacy interventions are based on a philosophy, or paradigm, of reading intervention. Usually this involves phonological, whole language, or developmental approaches. Sometimes multiple theories or philosophies may inform the design of programs.[12] (A list of the theoretical/philosophical approaches derived from the literature is provided in Appendix B.) In this study, we are concerned about the application of philosophy in practice, rather than the mere espousal of theory. Additionally, we are aware that many applied techniques (e.g., direct phonics instruction) may have an embedded philosophy (e.g., decoding). We are concerned about both the relationship between theory/philosophy and action on the one hand, and the congruence (or incongruence) between them on the other.

Classroom Instruction

Instructional methods are the specific approaches used to facilitate learning: e.g., sustained silent reading, storytelling, and so forth (see Appendix B). We limit program features classified as instructional to the strategies for the teaching of reading. These features are usually the ones that have the greatest direct effect on literacy outcomes. Thus, their coordination in an overall coherent design is especially crucial. It should also be noted that many features have an embedded philosophy. For example, until recently many trade books had an embedded whole language philosophy, because they emphasized student interest and literary quality, while comprehensive coverage and systematic use of vocabulary was employed by the basal books. More recently, however, reading programs are employing both of these features to take advantage of both benefits.

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[12] Indeed, one of our major conclusions is that approaches that combine philosophies have inherent advantages over those that emphasize one approach.

Professional Development

Professional development is the learning process used to build new skills and learn about new approaches. In an early intervention program, professional development may be the mechanism for introducing a teacher to a new technique, as is the case in Reading Recovery®. Professional development techniques also include ongoing school-based professional development, topical in-service sessions, and so forth (see Appendix B).

Parent Involvement

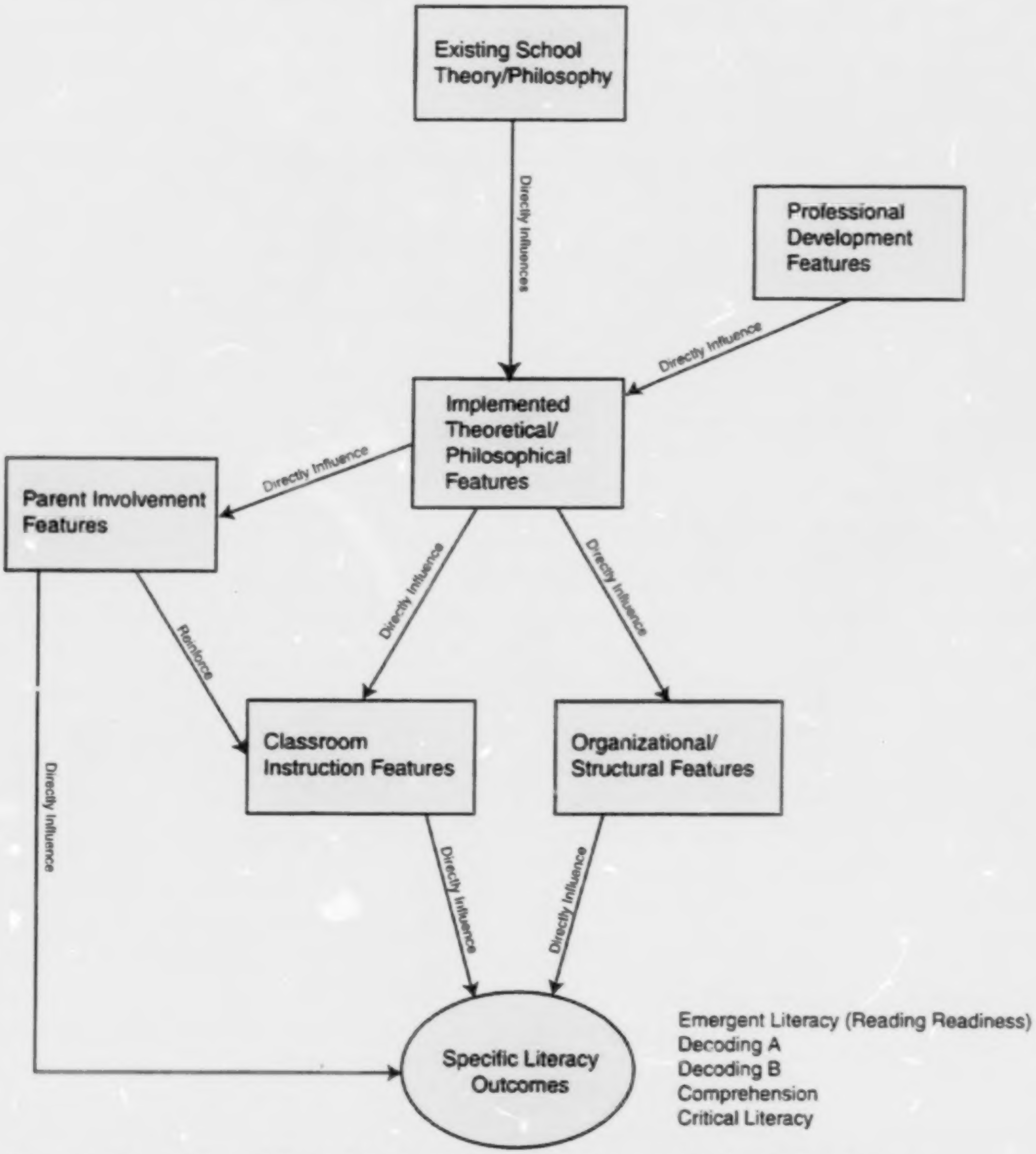
Several early literacy interventions include a parent component, and appropriately so. Parent involvement may include methods for working with children at home (e.g., book sacks, family literacy) as well as methods for involving parents as classroom volunteers (see Appendix B). Title I projects are especially likely to include a parent involvement component because this federal legislation mandates their involvement.

An Integrated Model for Intervention Processes

Based on our review of the research, we have developed the framework for assessing early literacy interventions to explain how the various types of program features fit together in the intervention process (Fig. 2.1). According to this generic model, professional development and the philosophy/theory components have indirect effects on specific literacy outcomes through other types of program features, while classroom instruction, parent involvement, and structure/organization have direct effects. This helps us explain the research findings we have investigated and therefore is used in our presentation of various types of programs.

The framework hypothesizes that some types of program features have indirect influences on literacy outcomes and others have a direct influence. Two very important forces—the existing philosophies in the school and the professional development component of the intervention—have an indirect influence on the way in which the

Figure 2.1
Framework for Assessing
Early Literacy Interventions


Existing School Theory/Philosophy
Directly Influences
Professional Development Features
Directly Influence
Implemented Theoretical/ Philosophical Features
Directly Influence
Parent Involvement Features
Directly Influence
Directly Influence
Reinforce
Directly Influence
Classroom Instruction Features
Organizational/ Structural Features
Directly Influence
Directly Influence
Specific Literacy Outcomes
Emergent Literacy (Reading Readiness)
Decoding A
Decoding B
Comprehension
Critical Literacy

theory (or philosophy) embedded in the intervention is actually implemented. This nexus of philosophy and action, in turn, influences the three aspects of the program that may directly influence literacy outcomes: parental involvement, structures and organization, and instruction. A high level of congruence between (a) the philosophy or set of philosophies guiding implementation and (b) the actual strategies implemented (the parental, instructional, and organizational components) can, at least in theory, improve (c) the effects of the programs, described as the literacy outcome. This framework for assessing literacy interventions was used to identify:

- *the features of an intervention programs,*
- *how the program features link to literacy outcomes, and*
- *the specific literacy outcomes that various interventions attempt to influence.*

Further, we used the framework as a basis for critically examining the research base for various types of literacy interventions. This approach to the review of program features and outcomes helped us discern which claims about program effects were likely to have empirical support. We summarize our findings about Reading Recovery®, Literacy Collaborative, Full Day Kindergarten, and Other Early Literacy Interventions below.

Implementation Findings

The framework was used for a structured analysis of the research of various types of literacy interventions. As a first step we reviewed literature on a diverse set of literacy intervention programs. Next we conducted a systematic review of studies related to each particular type of program or intervention. Based on the review we judged whether the claim (the linkage between program features and outcomes) was supported, partially supported, or not supported by the research. Finally, we also looked across sets of reviews, to make judgements about the likely effects of different types and categories, and about whether they had a research base. This approach was especially helpful in our efforts to develop a set of findings that held up across different types of interventions.

We also surveyed Funded School corporations asking questions about the program that had been implemented. We analyzed the surveys to discern whether new features had been implemented. Thus, we examined both the research literature and the results of the survey of funded corporations. The analyses examined four groups of funded projects, which are summarized below. (See Appendix C for a list of all funded projects.)

The Funded Projects

The Reading Recovery® program is designed to improve decoding and comprehension of low-achieving Grade 1 students. Students are provided with a systematic one-on-one intervention. In Indiana 70 corporations received funding totaling $1.7 million and served 1,855 students. One hundred eighty-four teachers received training in Reading Recovery® during the first year of the program.

Research Base

The Reading Recovery® program has a research base that supports the claim that Reading Recovery® helps raise low-achieving students to grade level. There is also evidence from some studies that Reading Recovery® can reduce more costly special education referrals.

Implemented Program Features

The first survey of Reading Recovery® projects that were implemented in Indiana during the 1997-98 school year shows that the program features that are considered crucial to the success of the program were consistently implemented (St. John, et al., 1998). Because the Reading Recovery® projects appear to be implemented appropriately, the implementation study concluded there was an increased probability that students completing the Reading Recovery® program will achieve on grade level and will not require special services. The current study assesses whether there was a measurable impact on these outcomes.

Costs and Effects

The additional costs to the state for training Reading Recovery® teachers were relatively low compared to the potential improvements in student outcomes: the state's costs for teacher leaders and teachers trained during the 1997–98 school year were about $917 per student served by these teachers. Thus, the program has a reasonable return in relation to the costs the state has incurred. Further, many of the newly trained teachers will continue to provide training, which will further increase the returns to the state on this investment. The state's costs per student served were lower in school corporations that had teachers who were trained in previous years. In the 1997–1998 school year, the state also paid Reading Recovery® maintenance costs and Reading Recovery® costs (to Purdue University). If these costs are included, then the state's per-student-served cost for the 1997–1998 school year increases by $150 per student serviced by teachers, to a total of $1,066 per student.

Literacy Collaborative (LC)

Funded Projects

The LC program is a whole school intervention process that enables schools to restructure regular classroom reading instruction in a manner that is more compatible with Reading Recovery®. Four school corporations that returned first-year surveys have projects classified as similar to LC—at least conceptually. This grant provided funding for projects serving a combined total of 423 students at a cost of $219,237. Further, 74 teachers and staff received professional development opportunities as part of these projects (St. John, et al., 1998).

Research Base

The LC program is well-conceived and logically should improve literacy for all students. However, LC is a new program and lacks a research base. Thus, research is needed; the systematic evaluation of the Indiana LC projects can potentially help develop this research base.

Implemented Program Features

The LC-related projects were being implemented in a manner that appears reasonably consistent with the program design.

Costs and Effects

The state grant funds per student in LC were $518, a substantially lower cost per student than Reading Recovery®. If the program raises average literacy achievement in Funded Schools or reduces referrals to special education, then it would be a good investment for the state.

Full-Day Kindergarten

Funded Projects

Seven Full-Day Kindergarten (FDK) projects were funded by the Early Literacy Intervention Grant Program, serving 218 students at a cost of $277,960. Further, 21 teachers and staff received professional development opportunities as part of these projects.

Research Base

The research literature indicates that Full-Day Kindergarten improves emergent literacy and can have a sustained effect on literacy in Grade 3 if the literacy component of the FDK program combines phonological awareness with the literature rich and developmental approaches typically included in Kindergarten programs.

Implemented Program Features

Five of the funded Full-Day Kindergarten projects included the combination of instructional features that are associated with sustained literacy improvements.

Costs and Effects

The IDOE Early Literacy Intervention Grant Program subsidized these Full-Day Kindergarten projects at an average cost of $1,275 per student, although actual subsidies varied substantially (from $75 to $3,473). This average per-student cost appears reasonable, given the apparently sound design of these interventions and apparently high probability of having a sustained impact on literacy.

Other Early Literacy Interventions

Funded Projects

Other early literacy interventions were funded in 52 school corporations, receiving a total of $1,165,158 and serving 7,189 students. These numbers exclude the LC and FDK interventions, which were discussed above. A total of 39 of these projects returned surveys. A total of 537 teachers and staff had professional development opportunities as a part of these projects. The projects used diverse approaches to literacy improvement.

Research Base

Our review of the literature indicates that the efficacy of early literacy interventions is increased if they include: recognition of the complexity of literacy; a coherent, well-conceived, and comprehensive design; and a well-defined focus on outcomes combined with an experimental (inquiry-based) approach.

Implemented Program Features

The 39 funded projects that returned first-year surveys were quite diverse in their form and content. Some programs (including Success For All, Even Start, Four Blocks, and a few other projects) appeared to include the features associated with successful literacy improvement (St. John, et al., 1998). However, many of the programs did not include these features.

Costs and Effects

The state's costs associated with these projects, $162 per student served, were relatively modest. Many of these class-wide and school-wide early intervention projects developed new approaches for improving literacy instruction. The costs per student served were lower than for the other methods examined.

A Strategy for Program Development

Based on the review, the Policy Center recommended strategies for refining the application and award process for the ELIGP, increasing the impact of the program, facilitating the school application process, and evaluating the program (St. John, et al., 1998). We summarize the recommendations and progress made by the IDOE on these recommendations below.

Application and Award Process

(a) A professional development component of the Early Literacy Intervention Grant Program should be generally available to schools. The support for professional development provided by Reading Recovery® through Purdue University should be encouraged, along with new university-based centers (or school-university partnerships) for professional development. However, new centers should be carefully planned and pilot-tested.

- The IDOE has continued to make training for Reading Recovery® generally available through ELIGP. In 1998-99 the ELIGP funded the training of approximately 228 teachers and 6 teacher trainers[13]. (Figures for 1999-2000 were not available at the time of this report.)
- The ELIGP has continued to pilot test different intervention methods, as part of the OELI projects. In 1999-2000, the ELIGP provided some financial support to Indiana University (Roger Farr) for pilot testing a new approach to early assessment.

(b) The other component of the Early Literacy Intervention Grant Program should emphasize classroom and school-wide intervention in high-need

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[13] Information provided by IDOE: Early Intervention/Reading Recovery® FY98-99, July 1, 1999 and Reading Recovery®/Teacher leader, July 23, 1999.

schools. These projects should be funded for a two-year period. The components of the program should include the following: an approved list of interventions for which there is a research base (e.g., Success For All); a list of programs that merit further testing because they are sound conceptually but lack a research base (e.g., ELLI and Four Blocks); and opportunities for schools to deign their own interventions that meet three criteria common to successful interventions.

- The Indiana Education Policy Center developed summary reviews of research-based early intervention programs that were disseminated as part of the ELIGP application information. These reviews were disseminated to all Indiana's elementary schools. (See Appendix D.)
- A special issue of the Indiana Education Policy Center's Policy News & Notes focused on planning for early literacy interventions and it was disseminated to all elementary schools in the state. (See Appendix E.)
- The funding for 1998-99 and 1999-2000 focused on research-based programs.

(c) The Indiana Department of Education (IDOE) should initiate a process for approving university-school partnerships (or centers) that provide professional development opportunities for reading intervention and/or facilitation of school-wide intervention. For example, Purdue University should be encouraged to continue to support Reading Recovery® as well as to pilot test the Literacy Collaborative (formerly referred to as ELLI). A select few other centers or partnerships should also be actively encouraged. However, it is important that these new ventures build a research base.

- The ELIGP funded the pilot testing of the Literacy Collaborative as part of the project funded at Purdue University.
- The ELIGP has funded a diverse array of other class-wide interventions (e.g., Four Blocks and First Steps). The systematic study of these interventions, as part of future evaluations, can help build a research base for these programs.

(d) The IDOE should provide workshops on school planning proposals for school-wide literacy intervention projects. These workshops should introduce strategies for developing early literacy interventions that are coherent, cohesive, and comprehensive, as well as provide guidance in the development of evaluation plans.

- The IDOE statewide conference provided information to schools on early literacy programs that could be funded through the ELIGP, including Reading Recovery® and other intervention methods (e.g., Four Blocks).
- The Education Services Centers have provided information to school corporations and schools about alternative approaches to early reading and literacy improvement.
- EDUCATE Indiana has provided professional development for schoolwide early literacy interventions (e.g., Four Blocks).

(e) *The site-based evaluation component of the Early Literacy Intervention Grant Program should be strengthened. It should include two types of evaluations. Schools with small grants (including schools in the general program) should be required to complete descriptive evaluations that provide an overview of the project (features implemented and students served) as well as information on student outcomes (retention rates, special education referrals, test scores). Schools with school-wide literacy improvement grants should complete well-designed evaluations with appropriate methodologies.*

- The IDOE strongly encouraged funded schools to cooperate in the Policy Center's impact study.
- Because the IDOE did not have funding for large, multi-year projects through ELIGP, the requirement for site evaluations was not necessary.

(f) *A state-wide study should be conducted. It should include an examination of early literacy projects in funded schools and a sample of non-funded schools, and a study of literacy programs in funded and non-funded schools that determines whether the projects funded in 1997-98 influenced referral rates, retention rates, and literacy achievement.*

- The Policy Center has completed a survey of schools funded in 1997-98 and the results are reported in this volume.
- A survey has been conducted for 1998-99 and will be reported on separately.

Conclusion

The Early Literacy Intervention Program, implemented by the Indiana Department of Education in 1997-98, funded a new set of site-based projects that appear to have a potential for improving early literacy. Further, based in part on recommendations from the Policy Center's implementation study completed last year, the IDOE has made further refinements to the ELIGP that should improve its chances of improving early literacy in future years because of refinements in the application and award process that encourage schools to undertake research-based early intervention programs.

This study presents the second phase of the Policy Center's study of the 1997-98 ELIGP. Using the conceptual model for assessing early interventions, we designed a new survey to assess early literacy programs in Indiana's schools. The new survey was sent to schools that received funding rather than to school corporations. The remainder of this report describes the actual change in early literacy programs that resulted from ELIGP funding in 1997-98 and on the impact of that funding on Indiana schools.

CHAPTER III

PROGRAM FEATURES IN FUNDED SCHOOLS

Early literacy instruction in schools is provided through a regular classroom curriculum and instruction practice, possibly supplemented by special pullout for special needs children (e.g., Reading Recovery®) or by special educational activities after school, possibly assisted by parents and families. The primary way that interventions in early-literacy programs can influence improvement in early reading and related outcomes is by changing the frequency, type, or quality of the programs used to instruct children. The survey developed for this study assessed program features included in the early literacy programs (Kindergarten through Grade 3) in 1996-97 and 1997-98. Program features in ELIGP schools were first examined and described (St. John, et al., 1998). We then conducted a survey of schools for changes in specific features. Five types of program features commonly identified as central to the funded interventions were examined. These include:

- *Structural/organizational features (e.g., ability grouping, cooperative learning)*
- *Classroom instructional features and practices (e.g., Big Books, phonics instruction)*
- *Implemented philosophy of the early literacy program (e.g., developmental, phonological awareness)*
- *Professional development (e.g., in-service workshops, certified specialists)*
- *Parent involvement (e.g., family literacy, book distribution).*

Because the ELIGP funded projects existed within the context of a school's primary grade programs, participants were asked to describe the practices in their early literacy programs as a whole, not simply within the grant program. These descriptions are based on reports of use in the 1997-98 school year (i.e. the first year of ELIGP funding), which we examined in the 1996-97 and 1997-98 school years. In this analysis, we focus on features related to structure/organization and classroom instructional practices in an attempt to answer two questions:

- *Were the structural/organizational features and classroom instruction practices similar for Funded and Comparison Schools?*
- *Were there changes in the structure/organizational features and instructional practices in Funded Schools?*

To address these questions, in this chapter we first examine the basic features of the instructional programs in both Funded and Comparison Schools. Then we systematically examine changes in organizational/structural features, instructional activities, and instructional resources. We also report the extent of change in Reading Recovery®, OELI, and Comparison Schools and conclude the chapter by addressing our two research questions.

Early Literacy Intervention Survey

The Early Literacy Intervention Survey was developed specifically for this project to assess the impact of the ELIGP. The ELIGP Advisory Committee provided feedback on drafts of the survey as it was developed. Committee members met at the Policy Center to discuss the final draft of the survey. The survey was then piloted by elementary principals. Principals provided verbal and written comments that were incorporated in the final draft of the survey. Surveys were mailed to 262 Funded and 351 Comparison Schools. After two weeks, participants were mailed a postcard reminding them to respond. After three weeks, a second survey was mailed to participants, and non-participants were called on the phone. One hundred sixty-seven ELIGP Funded Schools (64 percent) and 182 Comparison Schools responded for an overall response rate of 57 percent.

Overview of Program Features in Funded and Comparison Schools

We asked each school about the features of their programs, using a likert-type scale ranging from never (1) to every day (5) (see the survey instrument in Appendix A). On average, all three groups of schools (Comparison, Reading Recovery®, and OELI) made frequent use of Independent Reading and Small Groups, occasional use of One-to-One Tutorial and Child Initiated Learning Centers, and less frequent use of Ability Grouping. In 1998 the organizational features of Funded Schools did not differ significantly from the Comparison Schools (Table 3.1). Since none of these differences were statistically significant, we conclude that the organizational features of Funded Schools were essentially the same as those of Comparison Schools. All three groups of schools (Comparison, Reading Recovery®, and OELI) made relatively frequent use of Small Groups, One-to-One Tutorial, Independent Reading, and Child Initiated Learning Centers. Funded Schools made somewhat less frequent use of Ability Grouping.

Second, classroom instructional practices were examined (Table 3.2). Again, there were no significant differences among the groups. All three groups of schools made frequent use of Systematic Evaluation, Cooperative Learning, Creative Writing, Emergent Spelling, Phonics, Reading Aloud, and Reading Drills. These instructional activities comprise the majority of time spent in early literacy instruction in Indiana schools. Drama was used less frequently as an instructional technique, but was used at least occasionally in all three types of schools.

Table 3.1 Organizational Features in Funded and Comparison Schools (Grades 1-3) 1998

	COMPARISON	Reading Recovery®	OELI
Ability Grouping			
Number	173	70	62
Mean	2.69	2.94	2.76
Standard Deviation	1.14	1.28	1.16
Child Initiated Learning Center			
Number	171	72	63
Mean	3.32	3.56	3.41
Standard Deviation	.95	.96	.89
Independent Reading			
Number	172	73	64
Mean	4.55	4.47	4.56
Standard Deviation	.61	.71	.53
One-to-One Tutorial			
Number	174	74	64
Mean	3.73	3.85	3.73
Standard Deviation	.84	.89	.82
Small Group			
Number	175	73	63
Mean	4.25	4.37	4.38
Standard Deviation	.79	.68	.68

Scale
1 = Never
2 = Rarely
3 = Occasionally
4 = Often
5 = Everyday

Third, we also examined features related to the materials available for classroom instruction (Table 3.3). Basal Readers and Trade Books were used frequently in all three types of schools. This indicates a balanced approach to the use of literature based (i.e., Trade Books) and systematic reading (i.e., Basal Readers) materials. Worksheets were also frequently used, while Big Books were less frequently used.

Thus, the ELIGP funded interventions in an environment that was relatively stable across the state. The public schools in Indiana used a balanced approach to instruction in early reading that mixes features of whole language and systematic approaches to early literacy instruction.

Table 3.2 Instructional Features in Funded and Comparison Schools: Activities (Grades 1-3) 1998

	COMPARISON	Reading Recovery®	OELI
Systematic Formative Evaluation			
Number	175	74	63
Means	3.65	3.78	3.73
Standard Deviation	.74	.58	.70
Cooperative Learning			
Number	175	73	66
Means	3.71	3.88	3.81
Standard Deviation	.73	.76	.80
Creative Writing			
Number	172	73	66
Means	4.01	4.10	4.15
Standard Deviation	.56	.65	.64
Drama			
Number	174	72	65
Means	2.70	2.86	2.74
Standard Deviation	.67	.59	.67
Emergent Spelling			
Number	175	73	66
Means	4.09	4.05	4.21
Standard Deviation	.88	.78	.75
Phonics			
Number	174	72	64
Means	4.28	4.38	4.39
Standard Deviation	.73	.76	.66
Reading Aloud			
Number	173	73	65
Means	4.62	4.75	4.74
Standard Deviation	.54	.52	.57
Reading Drills			
Number	170	72	64
Means	4.05	4.10	4.05
Standard Deviation	.91	.86	.88

Scale 1 = Never
2 = Rarely
3 = Occasionally
4 = Often
5 = Everyday

Table 3.3 Instructional Features in Funded and Comparison Schools: Materials (Grades 1-3) 1998

	COMPARISON	Reading Recovery®	OELI
Basal Reader			
Number	168	73	63
Means	4.02	4.05	4.02
Standard Deviation	1.11	.86	.94
Trade Books			
Number	175	74	63
Means	3.94	4.12	4.08
Standard Deviation	.92	.86	.87
Big Books			
Number	175	73	66
Means	2.95	3.18	3.05
Standard Deviation	.76	.71	.97
Worksheets/Workbooks			
Number	172	72	65
Means	3.94	3.74	3.77
Standard Deviation	.95	1.01	.98

Scale **1 = Never**
2 = Rarely
3 = Occasionally
4 = Often
5 = Everyday

Participants were also asked to describe their implemented philosophies in the Early Literacy programs in their schools (Table 3.4). Rather than approach this question from an oversimplified whole language vs. phonics perspective, dichotomies were created contrasting key features of holistic and reductionist or skills-based approaches. These contrasts include Student Directed versus Teacher Directed instruction, a Prescribed/Systematic versus Child Centered/Developmental curriculum, Meaning/Comprehension versus Code/Phoneme taught within versus outside of context. A scale of one (low emphasis) to five (high emphasis) was used to quantify the difference. For instance, a score of "5" on Student Directed versus Teacher Directed indicates a high emphasis on Student Directed instruction as opposed to Teacher Directed instruction. A score of "3" reflects a neutral, or balanced philosophy.

Participants overall suggested a neutral or balanced philosophy towards early literacy instruction in general. Specifically, there was an overall balance (between 2.7 and 3.5 on the five-point scale) on three of the dimensions about philosophy. On the Child Centered/Developmental v. Prescribed/Systematic dimension, means hovered around the scale midpoint (2.82 to 3.07). On the dimension representing an emphasis on

Code/Phoneme v. Meaning/Comprehension, scores ranged from 2.99 to 3.13. Similarly, on the dimension assessing whether code/phonemes were taught Outside or Within Context, there was little variation among scores for the three program types (3.49 to 3.63), and all were situated near the midpoint of the scale. The exception to this trend was on the Teacher v. Student Directed dimension of philosophy. Most classrooms were more Teacher Directed than Student Directed, as indicated by mean scores lower than the scale midpoint for all three program types.

Table 3.4 Means for Implemented Philosophy in Early Literacy Programs (Grades 1-3) 1998

	COMPARISON	Reading Recovery*	OELI
Teacher Directed Instruction (1) Student Directed Instruction (5)			
Number	175	74	65
Means	1.93	2.15	2.26
Standard Deviation	.66	.80	1.93
Child Centered/Developmental (1) Prescribed/Systematic Instruction (5)			
Number	175	74	65
Means	3.07	2.82	2.91
Standard Deviation	1.03	1.09	.95
Code/Phoneme Emphasized (1) Meaning/Comprehension Emphasized (5)			
Number	174	74	65
Means	3.03	2.99	3.13
Standard Deviation	.71	.98	.82
Code/Phoneme Taught Outside Context (1) Code/Phoneme Taught Within Context (5)			
Number	174	73	66
Means	3.63	3.49	3.63
Standard Deviation	.85	1.12	.84

Participants were also asked about the Professional Development features that were a part of their early literacy programs (Table 3.5). Results indicate that a larger percentage of ELIGP Funded Schools than Comparison Schools had certified training or specialists come to the school to provide training. This suggests that additional resources translate to a high level of expertise being brought to schools. A larger percentage of Funded Schools than Comparison Schools reported that they provided opportunity for between-school teacher networking and release time for collaboration through meetings and peer observations. These activities are essential for increasing teacher technical skills, mentoring, and collaborative problem solving. It is clear that ELIGP funding has contributed to the support of literacy related professional development.

Table 3.5 Percent of Schools Including the Following Professional Development Features as a Component of Their Early Literacy Programs (Grades 1-3), 1998

		COMPARISON	Reading Recovery®	OELI
Certified Training				
	Number	34	28	18
	%	18.4	37.8	26.5
Certified Specialist				
	Number	29	24	23
	%	15.7	32.4	33.8
In-Service Workshops				
	Number	116	50	42
	%	62.7	67.6	61.8
Networking				
	Number	81	49	42
	%	43.8	67.1	61.8
Collaboration				
	Number	95	53	47
	%	48.6	71.6	69.1

A final set of program features included in the survey was parent involvement (Table 3.6). A larger percentage of Reading Recovery® Schools than OELI or Comparison Schools distributed books to households with low numbers of reading materials. Larger percentages of both groups of Funded Schools than Comparison Schools included literacy instruction for parents (Family Literacy) and made more frequent use of parent-child reading programs and parent volunteers. This suggests ELIGP funding contributed to parent involvement in early literacy programs.

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Table 3.6 Percent Schools Including the Following Parent Involvement Features as a Component of Their Early Literacy Programs (Grades 1-3), 1998.

		Comparison	Reading Recovery®	OELI
Book Distribution				
	Number	72	34	23
	%	39.1	45.9	33.8
Family Literacy Instruction				
	Number	34	20	19
	%	18.5	27.4	27.9
Paired Reading (Parent/Child)				
	Number	114	47	44
	%	62.3	63.5	64.7
Parent/Teacher Conferences				
	Number	165	72	63
	%	89.7	97.3	92.6
Parent Volunteers				
	Number	103	50	44
	%	56.3	67.6	64.7

A Balanced Approach

This analysis of program features in Funded and Comparison Schools reveals, first, that Indiana's elementary schools used a balanced approach to early literacy instruction. Furthermore, there were no differences between Funded and Comparison Schools on organizational and instructional processes. Second, the implemented philosophies also indicated a balance in the degree to which classrooms emphasized systematic holistic approaches. Again, Funded and Comparison Schools did not differ significantly on most dimensions of their implemented philosophies. Finally, the major differences between Funded and Comparison Schools were in the extent to which parent involvement and reading specialists were incorporated into their early literacy programs. Evidently, ELIGP funding provided opportunities for schools to supplement their balanced reading and literacy programs with greater parent and specialist involvement.

Organization and Structure of Literacy Programs

As the analyses above revealed, Funded and Comparison Schools did not differ in their average likert-scale scores on the organizational and structural features of their early reading and literacy programs. However, it can still be illuminating to examine differences in the frequency of use of various organizational and structural strategies. As is evident in Table 3.7, there were differences between the organizational and structural approaches used in Kindergarten and those used in Grades 1-3. In this section, we examine the individual features listed on Table 3.7, focusing on patterns of use by grade level (K, 1-3) rather than on statistical differences.

Ability Grouping

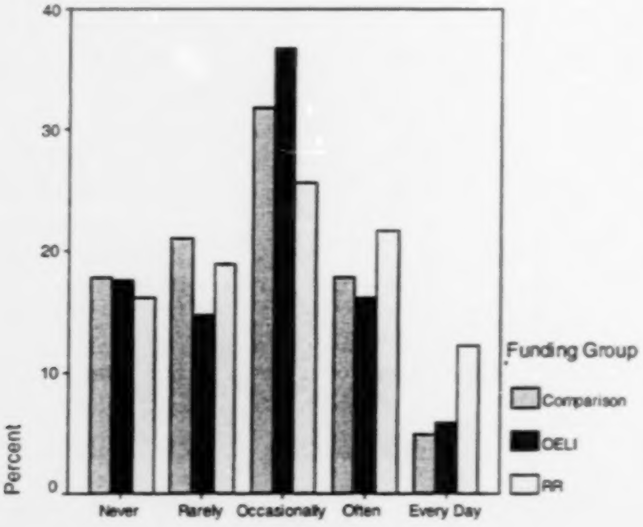
Ability Grouping is defined in this study as the practice of assigning students to instructional groups based on ability. By grouping students either within or across grades/classroom by reading ability level, teachers can more consistently focus instruction at the curricular level appropriate for students (see Table 3.7). This once very common way of organizing reading instruction has been criticized for possibly lowering teacher and student expectations as well as negatively impacting student self-esteem. In addition, groups of low-ability readers do not benefit from the modeling of more fluent readers that they may get from more homogeneous groups. In 1998, participants reported various levels of use of Ability Grouping, with a heavier reliance on Ability Grouping in Grades 1-3 as compared to Kindergarten (Table 3.7). In Kindergarten, 60 percent stated they rarely or never used Ability Grouping, approximately 27 percent used Ability Grouping occasionally, and 13 percent used it often or every day. In Grades 1-3, 39 percent indicated they rarely or never used Ability Grouping, 34 percent used it occasionally, and 27 percent of the participants indicated they used Ability Grouping often or every day. Participants indicated there was little change in the amount of Ability Grouping from 1997 to 1998.

There were also observable differences in the frequency of use of Ability Groups by funding type in Grades 1-3 (see Fig. 3.1). A larger percentage of Comparison Schools than Funded Schools reported never or rarely using Ability Grouping. A larger percentage of OELI schools than either Reading Recovery® or Comparison Schools reported occasionally using Ability Grouping. In contrast, a larger percentage of Reading Recovery® schools reported using Ability Grouping often or daily. This linkage between use of Ability Grouping and Reading Recovery® merits further investigation. If students return from Reading Recovery® into the lowest reading group, then they may not receive the full benefit of this special instruction.

Table 3.7 Percent of Respondents Reporting Using the Following Organization and Structural Features in their Early Literacy Programs (K-3)

Program Feature	1997			1998		
	Never/ Rarely	Occasionally	Often/ Everyday	Never/ Rarely	Occasionally	Often/ Everyday
Ability Grouping						
K	61	27	12	60	27	13
Grades 1-3	39	33	28	39	34	27
Child-Initiated Learning Center						
K	10	18	72	8	18	74
Grades 1-3	19	36	45	17	35	48
Cooperative Learning Groups						
K	14	35	51	12	33	55
Grades 1-3	4	35	61	3	33	64
Pullout Instruction						
K	55	26	18	55	27	18
Grades 1-3	30	29	49	22	31	47
Small Group Instruction						
K	5	21	74	4	19	77
Grades 1-3	1	13	86	1	13	86
Paired Reading						
K	33	38	28	30	36	34
Grades 1-3	5	30	65	3	26	71
One-to-One Tutoring						
K	15	31	54	12	31	57
Grades 1-3	8	29	63	5	30	64

Figure 3.1 Use of Ability Grouping (%) in Grades 1-3 by Funding Group, 1998



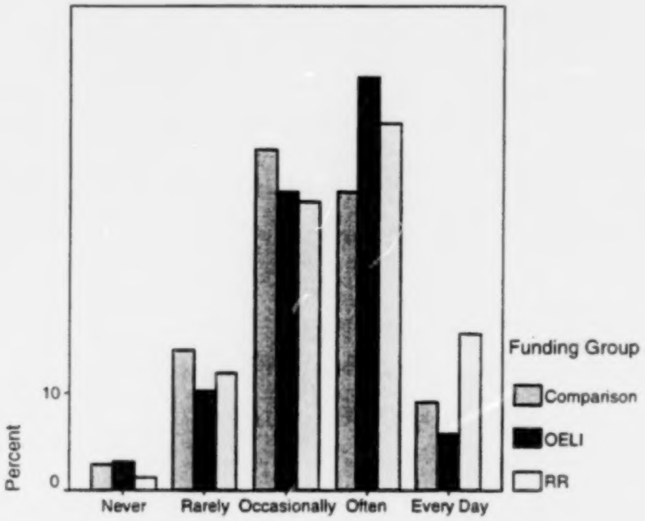
Child Initiated Learning Centers, Cooperative Learning, and Paired Reading

Child Initiated Learning Centers, Cooperative Learning, and Paired Reading are further examples of individualized instruction that have a greater degree of student direction than in Small Groups or One-to-One Tutorial. Like the other alternatives to whole class instruction, these structural features allow for individualized instruction and increased engagement in academic responding. They are designed to foster higher order, holistic aspects of student literacy as well as problem solving, expressive language skills and metacognitive awareness; all key skills necessary for reading and writing. The student directed groupings also allow for teachers to work with small groups of students directly while the rest of the class is engaged in these self-directed activities. Students in Cooperative Learning and Paired Reading activities tend to be heterogeneous in terms of ability level, as opposed to Ability Groups. In addition, Paired Reading, where students read to each other and are encouraged to help each other, is a technique that allows for repeated reading of texts, which has been found to be an effective way of increasing reading fluency and allows for peer tutoring. Because of the emphasis on student direction, these instructional features require a structure that includes the active participant of all students, immediate feedback and accountability in order to be effective. That is, simply having students grouped together and instructed to work together in cooperative groups or alone at a center are not true applications of these organizational features.

While each of these features was relatively common practice in primary grades in Indiana, the extent of their use was not universal. Child Initiated Learning Centers were more common in Kindergarten compared to Grades 1-3. In 1998, 74 percent of participants reported using Child Initiated Learning Centers often or every day in Kindergarten (Table 3.7). In Grades 1-3, approximately 48 percent used Child Initiated Learning Centers often or every day. There appeared to be a small increase in the use of Child Initiated Learning Centers for Kindergarten and Grades 1-3 in 1998 as compared to 1997.

The pattern of use of Child Initiated Learning Centers in 1997-98 is illustrated in Figure 3.2. A larger percentage of Comparison Schools than Reading Recovery® or OELI schools reported rare or occasional use of Learning Centers. A larger percentage of OELI schools than Reading Recovery® or Comparison Schools reported using Learning Centers often. Finally, more Reading Recovery® schools than OELI or Comparison Schools reported using this method every day.

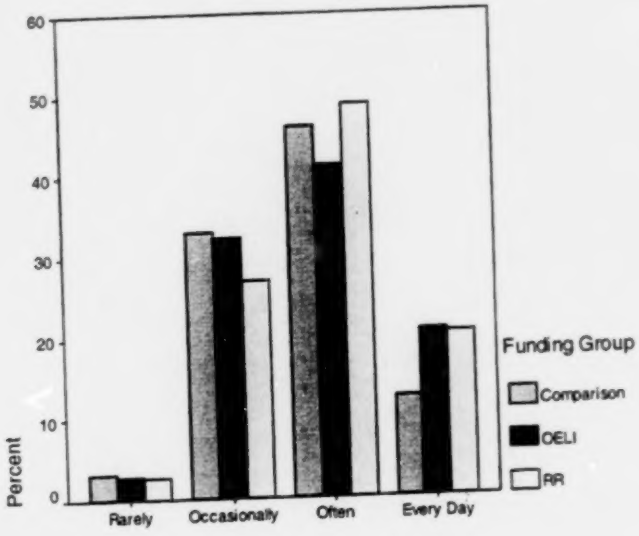
Figure 3.2 Use of Child Initiated Learning Centers (%) in Grades 1-3 by Funding Group, 1998



Participants reported that Cooperative Learning was a common form of instruction, but there is variation in degree of use across schools. In 1998, 12 percent of the participants stated that they rarely or never used Cooperative Learning, approximately 33 percent used Cooperative Learning occasionally, and approximately 55 percent used Cooperative Learning often or every day (Table 3.6). In Grades 1-3, none of the participants reported that they never used Cooperative Learning, only three percent rarely used Cooperative Learning, 33 percent used Cooperative Learning occasionally, and approximately 64 percent used Cooperative Learning often or every day. There appeared to be an increase in use of Cooperative Learning in Kindergarten and Grades 1-3 across years.

The pattern of use of Cooperative Learning is illustrated in Figure 3.3. A higher percentage of Comparison Schools than Reading Recovery® or OELI schools reported occasional use of Cooperative Learning. A higher percentage of Reading Recovery® schools than OELI or Comparison Schools reported using this method often. In contrast, higher percentages of both OELI and Reading Recovery® schools than Comparison Schools reported daily use of Cooperative Learning.

Figure 3.3 Use of Cooperative Learning (%) in Grades 1-3 by Funding Group, 1998



Small-Group Instruction and One-to-One Tutorial

Because students who are at-risk for school failure can be characterized as less adaptive than normally achieving students, forms of instruction that allow for more individualized instruction have generally been found to be most effective for teaching basic skills (Elbaum, Vaughn, Hughes, & Moody, 1999). Small Groups and One-to-One Tutorial allow for a intensive instruction at the appropriate skill level for individual students, as well as create an environment that encourages students to be engaged in higher rates of academic responding. High rates of academic responding in turn have been linked to greater skill gains.

While not universal, Small Group instruction appears to be used widely in Indiana primary grades. Participants reported that in their Kindergarten classes, four percent rarely or never used Small Group, approximately 19 percent used Small Group occasionally, and approximately 77 percent used Small Group often or every day (Table 3.7). In Grades 1-3, participants reported that only one percent rarely or never used Small Group, 13 percent used the Small Group occasionally, and approximately 86 percent used the Small Group often or every day. There appeared to be little difference in the use of small group instruction overall.

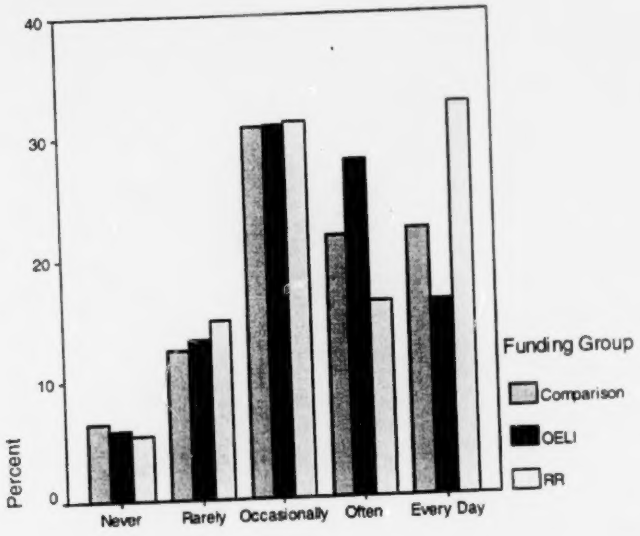
One-to-One Tutorial is unarguably a more expensive form of instructional grouping. Most schools reported at least occasional, if not frequent, use of One-to-One tutorial with at least some children in their school. For Kindergarten in 1998, 12 percent of the participants rarely or never used One-to-One Tutorial, approximately 31 percent occasionally used One-to-One Tutorial, and a little over half (57 percent) used One-to-One Tutorial often or every day (Table 3.7). For Grades 1-3, only five percent of the participants reported they rarely or never used One-to-One Tutorial, 30 percent used the One-to-One Tutorial on an occasion basis, and approximately 64 percent used One-to-One Tutorial often or every day. The reported use of One-to-One Tutorial increased from 1997 to 1998 in Kindergarten.

Pullout Instruction

Pullout Instruction is a traditional means of providing one-to-one or small group instruction through special remedial programs such as Title I and special education. It is defined here as students leaving their classroom for specialized instruction in another room. For the last decade or more, the pullout feature in remedial programs has been criticized as contributing to a "second" system of students who, because of pullout, miss out on a part of the mainstream curriculum, as well as excluding students socially from the rest of the class. It is also an expensive way in which to provide services, and because of the variability of what can occur in the classroom, has not been proven to be more effective than more inclusive programming (Manset & Semmel, 1997). In Kindergarten, 55 percent stated they rarely or never used Pullout Instruction, approximately 27 percent used Pullout Instruction occasionally, and approximately 18 percent used Pullout Instruction often or every day. In Grades 1-3, the participants reported that only 22 percent rarely or never used Pullout Instruction, 31 percent used Pullout Instruction occasionally, and approximately 47 percent used Pullout Instruction often or every day (Table 3.7). There appears to be a slight decrease in use of Pullout Instruction in Kindergarten and Grades 1-3 in 1998 as compared to 1997.

The patterns of use of Pullout Instruction are illustrated in Figure 3.4. All three types of schools reported similar percentages of classrooms that never, rarely, and occasionally used Pullout Instruction. However, there were differences among schools in the percentage of classrooms reporting frequent use of Pullout Instruction. A higher percentage of OELI schools than Reading Recovery® or Comparison Schools used Pullout Instruction often, while a higher percentage of Reading Recovery® schools than other schools reported daily use of Pullout Instruction. This pattern illustrates that Pullout Instruction is a predominant feature of Reading Recovery®. Interestingly, OELI schools reported less daily use of Pullout Instruction. This reflects greater use of class-wide methods, such as Four Blocks.

Figure 3.4 Use of Pullout Instruction (%) in Grades 1-3 by Funding Group, 1998



Instructional Practices

The Instructional Practices identified in this study were drawn from the research on early literacy programs. They represent practices associated with higher-order, holistic literacy skills such as comprehension and creative/essay writing, as well as lower-order, enabling skills such as word attack and spelling. In combination, they illustrate a balanced approach to literacy instruction, although there is no definitive agreement between time spent on any of these activities and what is considered balanced instruction. They do, however, illustrate instructional approaches that have been found to contribute to some aspect of literacy gains for at least some students at-risk for reading failure. As can be seen by the data, participants report that they are currently all used to some extent in Indiana schools.

There are both similarities and differences across grades in the frequency of use of the various instructional practices (see Table 3.8). The biggest differences are in the use of Independent Reading, Creative Writing, and Reading Drills. These instructional methods are used often or every day in most Grade 1-3 classrooms and to a lesser extent in Kindergarten classrooms.

Reading Aloud and Independent Reading

Reading Aloud (teachers reading to students) and Independent Reading are examples of efforts to immerse students at an early age in complete, whole versions of text as opposed to exercises in decontextualized instruction in word attack or simple sentences controlled for phonetic content. The benefits of both of these practices is that students have opportunities to develop an understanding of whole text structure, comprehension strategies, vocabulary, fluency and embedded decoding skills as well as experience the pleasures associated with reading. With these activities, students are reminded of why they should work so hard to learn basic reading skills. This may particularly be important for students at-risk, who tend to be non-strategic learners who require extra practice, effort and motivation to succeed. Reading Aloud provides the additional advantage of exposing students with limited reading skills to more advanced examples of text. Teachers have the additional advantage of being able to teach skills within the context of authentic text.

Both Reading Aloud and Independent Reading appeared to be common and frequent practices in schools (Table 3.8). Participants reported that the use of Reading Aloud was about the same for Kindergarten and Grades 1-3. In 1998, for Kindergarten, one percent stated they rarely used Reading Aloud, approximately six percent occasionally used Reading Aloud, and 94 percent used Reading Aloud often or every day. For Grades 1-3, only one participant rarely used Reading Aloud, three percent used Reading Aloud occasionally, and approximately 97 percent used Reading Aloud often or every day. There appeared to be very little change in use of Reading Aloud in Kindergarten and Grades 1-3 from 1997 to 1998.

Most participants reported extensive use of Independent Reading. In Kindergarten, 23 percent stated they rarely or never used Independent Reading, approximately 26 percent used Independent Reading occasionally, approximately 56 percent used Independent Reading often or every day. In Grades 1-3, few participants (less than one percent) reported that they rarely used Independent Reading, approximately five percent used Independent Reading occasionally, and approximately 94 percent used Independent Reading often or every day. There appeared to be an increase in use of Independent Reading in Kindergarten and Grades 1-3 in 1998 as compared to 1997.

Table 3.8 Percent of Respondents Reporting Using the Following Instructional Activities in Their Early Literacy Programs

Program Feature	1997			1998		
	Never/ Rarely	Occasionally	Often/ Everyday	Never/ Rarely	Occasionally	Often/ Everyday
Independent Reading						
K	19	28	54	23	26	56
Grades 1-3	2	8	90	.3	5	94
Reading Aloud						
K	2	6	92	1	6	94
Grades 1-3	0	3	97	.3	3	97
Creative Writing/Essay						
K	25	34	41	21	30	50
Grades 1-3	2	18	79	1	12	87
Drama						
K	40	47	12	38	47	15
Grades 1-3	35	58	6	33	58	8
Reading Drills						
K	21	24	54	21	22	57
Grades 1-3	7	19	75	6	18	76
Systematic Formative Evaluation						
K	15	27	58	13	27	61
Grades 1-3	7	28	65	5	26	68
Phonics Instruction						
K	3	9	88	3	8	89
Grades 1-3	2	9	89	2	9	88
Emergent Spelling						
K	14	24	62	11	21	69
Grades 1-3	6	17	77	5	13	82

Creative Writing/Essay and Emergent Spelling

Opportunities to write at an early age are naturally associated with an increase in writing skills, as well as the development of understanding of text and word structure, that will in turn support developing reading skills. Emergent Spelling has been introduced as an instructional technique to encourage writing at an age (generally Kindergarten and Grade 1) when students have not yet developed mature spelling skills. Creative/Essay Writing appears to be more common in Grades 1-3 than Kindergarten, and the degree to which writing is reported to occur frequently (Table 3.8). For Kindergarten in 1998, 21 percent stated they rarely or never used Creative Writing and/or Essay, approximately 30 percent used Creative Writing and/or Essay occasionally, and approximately 50 percent used Creative Writing and/or Essay often or every day.

In Grades 1-3, only one percent of the participants rarely used Creative Writing and/or Essay, 12 percent used Creative Writing and/or Essay on an occasional basis, and approximately 87 percent used Creative Writing and/or Essay often or every day. Overall,

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there appeared to be an increase in use of Creative Writing and/or Essay in Kindergarten and Grades 1-3 across the two years.

Emergent Spelling appeared to be a widely used practice in both Kindergarten and Grades 1-3. For 1998, 11 percent of the participants indicated that they rarely or never used Emergent Spelling in Kindergarten, approximately 21 percent used Emergent Spelling occasionally, and approximately 69 percent used Emergent Spelling often or every day (Table 3.8). For Grades 1-3, the participants reported that only five percent rarely or never used Emergent Spelling, 13 percent used Emergent Spelling occasionally, and approximately 82 percent used Emergent Spelling often or every day. There appeared to be an increase in the use of Emergent Spelling in Kindergarten and Grades 1-3 from 1997 to 1998.

Drama

The use of Drama is a means of incorporating oral language into literacy instruction and creating a concrete means of comprehending text. Drama, with its immediacy, represents a relatively low level of abstraction as compared to other means of literary expression (Moffet, 1968). For this reason, text becomes more accessible to students, particularly young readers or those at-risk. In addition, providing a reason for students to express themselves orally is beneficial for students with communication disorders, many of whom are at-risk for reading failure because of their deficits in language. Drama can also be a highly motivating variation to the day-to-day routine of reading instruction.

While it appeared to be common practice to occasionally use Drama as a part of literacy programs, it was reported to be one of the least common instructional activities in schools. Thirty-eight percent of the participants reported they rarely or never used Drama in Kindergarten, approximately 47 percent used Drama occasionally, and 15 percent used Drama often or every day (Table 3.8). In Grades 1-3, participants reported that 33 percent rarely or never used Drama, 58 percent used Drama occasionally, and approximately eight percent used Drama often. None of the participants reported using Drama every day. There was little difference in the frequency of drama use between the two years.

Reading Drills and Phonics Instruction

Reading Drills are defined in this study as directly instructing students in reading sub-skills, using directly-targeted, repetitive, and analytic exercises. Participants were also asked to indicate the extent to which Phonics (defined here as direct, explicit instruction in sound-letter correspondences) were used in their classroom instruction.

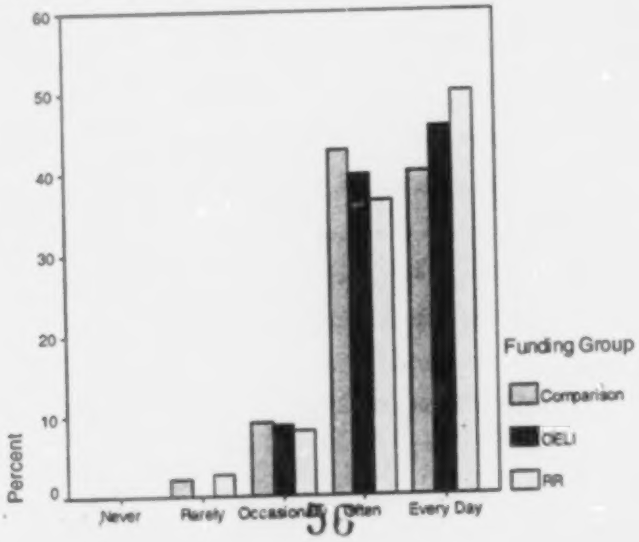
While these activities are not truly reading, they are designed to help students develop proficiency in the lower-order skills necessary in order to become a fluent reader. That is, they provide a foundation in the skills that enable both reading and writing. While there is much current debate over the degree in which these activities should be included in early literacy programs, research has demonstrated that, particularly for students at-risk for reading failure, some sort of explicit instruction in lower-order, enabling skills is not only effective but often essential.

Participants indicated that both Reading Drills and Phonics instruction were common practices in Indiana schools. Eighty-eight percent of the participants reported that some sort of explicit Phonics instruction was taught often or everyday in Grades 1-3, and a similar number reported the same (89 percent) for Kindergarten (Table 3.8; Fig. 3.5).

There was more variation in the reported use of Reading Drills. For 1998, participants reported that approximately 21 percent never or rarely used Reading Drills, 22 percent used Reading Drills occasionally, and 57 percent used Reading Drills often or every day in Kindergarten. In Grades 1-3, six percent rarely or never used Reading Drills, 18 percent used the Reading Drills occasionally, and approximately 76 percent used the Reading Drills often or every day. There was very little reported difference in the reported use of Reading Drills in Kindergarten and Grades 1-3 from 1997 to 1998.

Similar percentages of Funded and Comparison Schools reported occasional use of Phonics in Grades 1-3. While greater percentages of OELI and Comparison Schools than Reading Recovery® schools reported frequent use of Phonics, that trend was reversed on daily use of this technique, with greater percentages of OELI and Reading Recovery® schools than Comparison Schools reporting use of Phonics every day.

Figure 3.5 Use of Phonics (%) in Grades 1-3 by Funding Group, 1998



Systematic, Formative Evaluation

Frequent, systematic evaluation allows teachers to adjust their instruction constantly to reflect the instructional needs of their students. Rather than being driven by a set curriculum, or depending on infrequent, summative evaluation to determine what students had learned (or not learned) and move on, Systematic Formative Evaluation allows for a dynamic assessment of student progress and the subsequent adjustment of instructional methods. Researchers have found that just the introduction of formative evaluation alone has resulted in greater basic skill gains for students at-risk. This evaluation method can range from weekly timed readings as in the Running Record in Reading Recovery® or Curriculum-based Measurement to the use of portfolios and videotaped readings. Generally, but not always, this form of evaluation allows for a focus on holistic skills like reading a passage or writing an essay/story.

There appeared to be a very slightly higher use of Systematic Formative Evaluation in Grades 1-3 compared to Kindergarten. Overall there appeared to be a slight increase in use of Systematic Formative Evaluation in Kindergarten and Grades 1-3 across the years (Table 3.8).

Instructional Resources

The instructional materials that are used in a classroom define the focus of literacy instruction as well as structure in which that instruction is presented. The materials defined for this study have been identified as associated with particular early literacy programs.

Trade Books and Basal Readers

Trade Books are defined in this study as "literature based." They differ from other forms of commercially created instructional reading materials in that they represent "authentic" literature. In using Trade Books in instruction, students are exposed to the text structure and complex vocabulary of narratives written to tell a story rather than to teach reading. The language of Trade Books is thought to be on the whole richer than more controlled reading materials. There are associated advantages to reading whole books rather than only excerpts or short stories that may be contained in Basal Readers. Students are also exposed to the stories that are a part of the learning about the world around them. The disadvantage to Trade Books is that because their vocabulary and word structure are not controlled, students with developing skills are not exposed to repeated examples of the same phonemic, syntactic or semantic form in a word within the same story. For instance, a story controlled for phonemes may include a sentence such as: "The fat cat sat on the mat". Basal Readers on the other hand, are often controlled for word and sentence structure as well as readability. Teachers have a sense of the level at which students should be reading because students can simply graduate to the next book. A comprehensive Basal Reader series may include not only controlled text but exercises that isolate skills that reinforce what is read in the text. Basal Readers may also be designed to closely reflect state-mandated curriculum and therefore the tests that make up that accountability system. However, to contrast Basal Readers with Trade Books is not simple. Publishers have addressed the advantages of using both types of texts by including authentic literature as a part of a basal series, while Trade Books that are designed for reading instruction are, in turn, presented in a series of increasing difficulty, with readability indicated for the instructor. Teachers are also encouraged to find patterned Trade Books for early readers: that is, primary storybooks that repeat a syntactic/semantic pattern.

Participants reported that both Trade Books and Basal Readers were commonly used in Indiana schools, although there was variation between grade levels (Table 3.9) and among schools (Figs. 3.6 and 3.7). There was more frequent use of Trade Books and Basal Readers in Grades 1-3 as compared to Kindergarten (Table 3.9). At the Kindergarten level in 1998, 10 percent of participants rarely or never used Trade Books, approximately 23 percent used Trade Books occasionally, and approximately 67 percent used Trade Books often or every day. In Grades 1-3, only five percent of the participants reported they rarely or never used Trade Books, 21 percent used Trade Books occasionally, and approximately 74 percent used Trade Books often or every day. There appeared to be an increase in the use of Trade Books in both Kindergarten and Grades 1-3 across the years.

Greater percentages of both OELI and Reading Recovery® schools than Comparison Schools reported frequent or daily use of Trade Books, a literature-rich method of reading instruction (Table 3.9). This finding, in combination with the earlier finding that a greater percentage of Funded Schools than Comparison Schools reported daily use of Phonics (see Fig. 3.5) provides further illustration that ELIGP funding has encouraged a balanced approach to reading and literacy programs in Indiana schools.

In Kindergarten, 58 percent stated they rarely or never used Basal Readers, approximately 13 percent used Basal Readers occasionally, and approximately 30 percent used Basal Readers often or every day (Table 3.9). In Grades 1-3, only seven percent of the participants reported they rarely or never used a Basal Reader, 18 percent used the Basal Reader occasionally, and approximately 75 percent used a Basal Reader often or every day.

Table 3.9 Percent of Respondents Reporting Using the Following Instructional Materials

Instructional Material	1997			1998		
	Never/ Rarely	Occasionally	Often/ Everyday	Never/ Rarely	Occasionally	Often/ Everyday
Trade Books						
K	11	26	63	10	23	67
Grades 1-3	6	23	71	5	21	74
Worksheets/Workbook						
K	29	32	39	31	31	38
Grades 1-3	10	19	71	10	21	69
Basal Readers						
K	57	13	30	58	13	30
Grades 1-3	6	16	78	7	18	75
Big Books						
K	3	14	83	2	12	86
Grades 1-3	25	51	24	26	49	25

Figure 3.6 Use of Trade Books (%) in Grades 1-3 by Funding Group, 1998

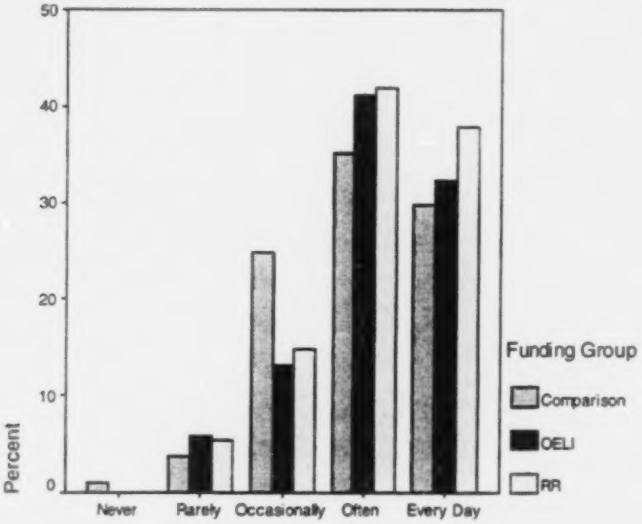


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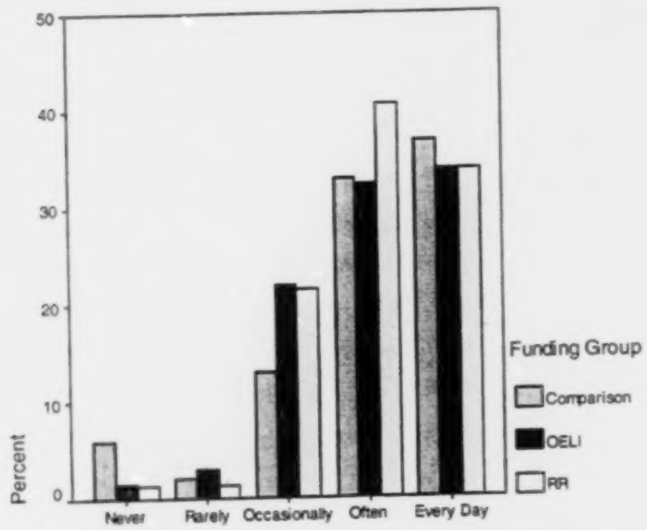
Figure 3.7 Use of Basal Readers (%) in Grades 1-3 by Funding Group, 1998



There was a great deal of variation among schools in the use of Basal Readers (Fig. 3.7). Greater percentages of OELI and Reading Recovery® schools than Comparison Schools reported occasional use of Basal Readers. Greater percentages of Reading Recovery® schools than OELI or Comparison Schools reported frequent use of Basal Readers. Finally, greater percentages of Comparison Schools than OELI or Reading Recovery® schools reported daily use of Basal Readers.

Worksheets/Workbooks

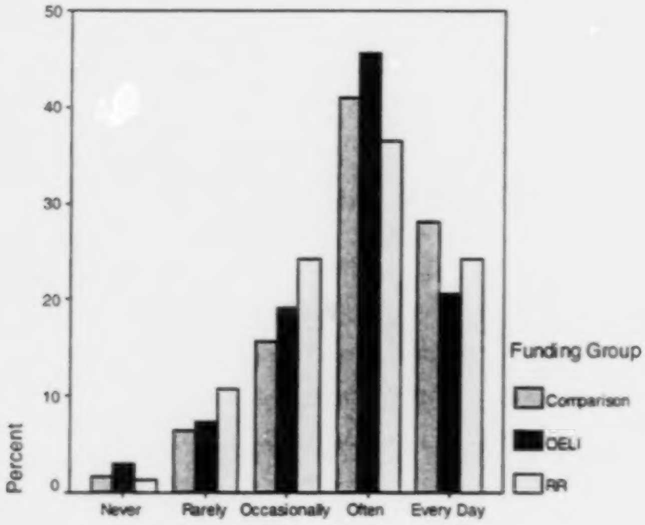
Worksheets/Workbooks represent a systematic, closed written response related to lower-order enabling skills such as word attack or spelling. Reading comprehension that is measured by a closed response (such as responses found on standardized tests) are also incorporated in Worksheets/Workbooks.

In Kindergarten, 31 percent of the participants stated they rarely or never used Worksheets/Workbooks, approximately 31 percent used Worksheets/Workbooks occasionally, 38 percent used Worksheets/Workbooks often or every day (Table 3.9). In Grades 1-3, 10 percent rarely or never used Worksheets/Workbooks, 21 percent used the

Worksheets/Workbooks occasionally, and approximately 69 percent used Worksheets/Workbooks often or every day.

Larger percentages of all funding groups reported frequent, as opposed to any other level of use, of Worksheets/Workbooks (Fig. 3.8). Larger percentages of OELI schools reported frequent use of Worksheets/Workbooks, and larger percentages of Comparison Schools reported daily use of this instructional resource.

Figure 3.8 Use of Worksheets/Workbooks (%) in Grades 1-3 by Funding Group, 1998



Big Books

Big Books are an instructional material that includes one large book for the instructor and smaller copies of the same book (usually a trade book) for students to read along. In 1998, two percent of the participants rarely or never used Big Books, approximately 12 percent used Big Books occasionally, and approximately 86 percent used Big Books in Kindergarten often or every day (Table 3.9). For Grades 1-3, 26 percent of the participants rarely or never used Big Books, 49 percent used the Big Books occasionally, and approximately 25 percent used Big Books often or every day.

Changes in Program Features

The provision of ELIGP support is expected to result in a change in literacy program features that will, in turn, lead to positive outcomes. In order to determine change in program features, crosstabulations were calculated for reported frequency-of-use gains between the pre-funding year (1996-97) and the first funding year (1997-98). Although these changes were not significant, some interesting patterns of change do emerge.

A slightly larger percentage of OELI schools increased their use of Ability Grouping, Small Groups, Paired Reading, and Emergent Spelling (Table 3.10). Some of the programs included in OELI (e.g., Success for All and Literacy Collaborative) incorporated all of these features, but others did not (e.g., Four Blocks). Therefore, it is reasonable that there was somewhat more change in OELI schools, but that this change was not statistically significant.

Slightly larger percentages of both OELI and Reading Recovery® schools increased their use of Child Initiated Learning Centers, Systematic Formative Evaluation, Trade Books, Creative/Essay Writing, and Drama. Receiving extra funding provided the opportunity for some schools to implement these features. Indeed, some funded interventions (e.g., Success for All and Literacy Collaborative) included all of these features. Further, the fact that funding Reading Recovery® enabled some schools to include Child Initiated Learning Centers and Creative Writing could be related to the increased freedom of regular classroom teachers who are getting assistance with their most challenging children. Further, Systematic Formative Evaluation and Trade Books could be related directly to Reading Recovery®, especially if classroom teachers adopt techniques that integrate Reading Recovery® within the regular classroom.

Thus, the features actually included in the diverse projects funded through ELIGP help explain why there is slightly more evidence of change in program features within schools funded by ELIGP, but that not all schools funded by the program changed these features. Further, the fact that many of these features were already present in schools before they were funded helps explain the limited extent of change in program features in Funded Schools. Indeed, both Funded and Comparison Schools had balanced approaches in their early primary literacy program in 1996-97, the year before ELIGP was funded.

Summary of Changes in Program Features

In concluding these analyses of program features, we focus on the ways these analyses address the two questions identified earlier. Were the structural/ organizational features and classroom and classroom instruction practices similar for Funded and Comparison Schools?

Table 3.10 Percent of Schools Reporting Increase in Program Feature

	FUNDING TYPE			
	COMPARISON	RR	OELI	TOTAL
Ability Grouping				
Number	13	5	7	25
% Within Funding Type	8.0	6.8	11.1	8.3
Basal Readers				
Number	1	1	0	2
% Within Funding Type	.6	1.3	0	.7
Child Initiated Learning Center				
Number	15	9	8	32
% Within Funding Type	9.3	11.7	12.5	10.6
Independent Reading				
Number	12	7	8	27
% Within Funding Type	7.4	9.2	12.7	8.9
One-on-One Tutorial				
Number	17	9	6	32
% Within Funding Type	10.3	11.5	9.4	10.4
Pullout Instruction				
Number	11	1	4	16
% Within Funding Type	6.7	1.3	6.3	5.2
Small Groups				
Number	8	4	7	19
% Within Funding Type	4.8	5.1	11.1	19.2
Systematic Formative Evaluation				
Number	9	8	7	24
% Within Funding Type	5.4	10.1	11.1	7.8
Trade Books				
Number	9	13	9	31
% Within Funding Type	5.4	16.3	14.3	10.0
Big Books				
Number	9	3	4	16
% Within Funding Type	5.4	3.8	6.1	5.2
Copperative Learning				
Number	18	5	5	28
% Within Funding Type	10.8	6.4	7.6	9.0
Creative/Essay Writing				
Number	22	19	11	52
% Within Funding Type	13.5	24.4	16.7	16.9
Drama				
Number	11	8	9	28
% Within Funding Type	6.7	10.3	13.6	9.1
Paired Reading				
Number	17	10	11	38
% Within Funding Type	10.4	12.8	16.9	12.4
Emergent Spelling				
Number	21	7	12	40
% Within Funding Type	12.7	8.9	18.2	12.9
Phonics				
Number	16	6	2	24
% Within Funding Type	9.7	7.7	3.1	7.8
Reading Aloud				
Number	4	4	3	11
% Within Funding Type	2.4	5.1	4.6	3.6

	FUNDING TYPE			
	COMPARISON	RR	OELI	TOTAL
Reading Drills				
Number	8	4	4	16
% Within Funding Type	5.0	5.1	6.2	5.3
Worksheets/Workbooks				
Number	1	2	2	5
% Within Funding Type	.6	2.6	3.1	1.6
Total Number	163	74	63	300

This analysis of the instructional programs in Indiana's elementary schools reveals that a balanced approach to early literacy instruction is being used. Most schools have the following features in their early primary literacy programs:

- Basal Readers (a systematic approach consistent with the phonics tradition) and Trade Books (a literature based approach consistent with whole language tradition).
- Independent Reading (a literature rich approach for all students) and One-to-One Tutorial (a direct intervention approach aimed at helping low achieving students).
- Child Initiated Learning Centers (an approach that fosters individual interests) and Systematic Formative Evaluation (an approach that systematically organizes learning opportunities).
- Creative Writing, Phonics, Cooperative Learning, Reading Aloud, a combination of techniques to promote learning in diverse, but complementary ways.

Thus, the elementary schools in Indiana approach early literacy instruction with a high degree of commonality, reflecting both coherence in state reading policy and the sound judgment of educators who routinely use a combination of methods to encourage all children to read. Within this sound, balanced learning environment, the state of Indiana has implemented two types of early literacy interventions.

Reading Recovery® is a systematic, balanced approach to reading that pulls high-need children out of the classroom for special, systematic instruction as well as to increase reading skills during their first year of school, when children most need intensive intervention. Reading Recovery® was implemented in Indiana two years before the ELIGP. Our previous study revealed that the training opportunities provided by ELIGP increased the number of teachers trained in Reading Recovery® and the number of children served (St. John, et al., 1998). This study revealed that the ELIGP increased the number of students who actually completed the basic set of lessons under Reading Recovery® and were discontinued for their success.

In addition, there was a diverse set of other early literacy intervention projects funded by ELIGP during the first year of the program. The features of these programs were quite diverse, with some programs incorporating and linking a diverse set of program features and others focusing on specific activities. The evidence presented in this study suggests that new program features introduced as a result of OELI projects had a significant influence on reducing special education referrals and retentions in early grade levels.

Were there changes in the structure/organizational features and instructional practices in Funded Schools? There were changes evident in the instructional programs in both Funded and Comparison Schools. However, since the new interventions were implemented in a context that included a systematic, literature-rich approach to early literacy instruction, the extent of change was not substantial. Nevertheless, across the two years there was a greater degree of change in the frequency of use of program features for Funded Schools than for Comparison Schools. The features that changed slightly more frequently in Funded Schools included:

- *Small Groups (in OELI schools)*
- *Systematic Formative Evaluation (in both Reading Recovery® and OELI schools)*
- *Trade Books (in both Reading Recovery® and OELI schools)*
- *Creative/Essay Writing (in both Reading Recovery® and OELI schools)*
- *Drama (in both Reading Recovery® and OELI schools)*

Increased use of these program features within the reading programs at Funded Schools illustrates a pattern of building on the systematic balanced approach to instruction that is already in use in Indiana's elementary schools. Thus, the ELIGP continued to build on the strengths of the basic literacy programs in Indiana in 1998.

CHAPTER IV

CASE STUDIES OF ELIGP FUNDED SCHOOLS

Indiana Education Policy Center staff conducted site-visits of three 1997-98 ELIGP Funded Schools. These visits included interviews with teachers, administrators and specialists as well as observations. They allowed for an in-depth, qualitative description of how ELIGP funding has impacted literacy programs in project schools. Programs included in these site-visits are Four Blocks, Success For All, and a locally developed program identified here as "Kids' Place.[14]" Each program is described in depth with selected quotes from interviews. The descriptions are organized around the following evaluation framework designed for this study:

- Implemented Theoretical/Philosophical Approach
- Professional Development
- Organizational/Structural Features
- Classroom Instructional Features
- Parent Involvement
- Literacy Outcomes

A summary and conclusions follow the descriptions.

Methods

In an effort to better understand literacy intervention programs, the Indiana Education Policy Center staff chose to look at sites for three of the larger intervention programs (Success For All, Four Blocks, and a locally developed program: Kids' Place). Success For All is a "comprehensive school restructuring process designed for schools with large at-risk populations" (Bardzell, 1999, p.1). Four Blocks is a multi-method "framework that provides an organized, systematic structure for providing early literacy instruction" (Manoil & Bardzell, 1999, p.1). Kids' Place is a pullout, day program for low performing Kindergarten and Grade 1 students in Indiana. The program uses an eclectic mix of methods to help students achieve grade level performance.

Qualitative methods were used for this investigation. It can be said that qualitative research is "learning from people" rather than "studying people" (Spradley,

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[14] In order to maintain confidentiality according to Indiana University Human Subjects agreement, the name of the locally designed program was changed and all identifying information removed from this chapter.

1979, p.3). Research teams from Indiana Education Policy Center at Indiana University conducted interviews with teachers, aides, and various administrators at each of the three sites. In addition, the research teams observed classrooms at each of the three sites. Informants included teachers, specialists and administrators. In addition, the research team observed several classrooms. Interviews were transcribed and observations were written up. The data were then coded for themes. The result is the following rich description of the implementation of three ELIGP funded programs, organized according to the evaluation framework designed for this study.

Four Blocks Method

The Four Blocks Method (Cunningham, Hall, & Defee, 1991) is a classroom-based reading intervention that combines phonological and literature-based approaches. Four Blocks method combines features from divergent approaches to reading. Recognizing the complexity of reading and that individual "fads" in reading instruction are potential sources of ideas, the developers devised an eclectic framework for teaching reading. This framework comprises the following Four Blocks: phonics, basal instruction, "real books" (i.e., trade books), and writing. Four Blocks Method is not a school restructuring intervention. Instead, it is a teaching framework for use in regular classrooms. While it has no reliable research base, Four Blocks deploys in a logical way features used successfully in other well-researched programs.

Due to its comprehensive approach to literacy instruction, the Four Blocks Method would likely fit in most existing school settings. Indeed, it is designed to organize and build on common approaches to reading. The decision to use Four Blocks in the school came about at the initiative of the corporation reading coordinator. (She [the coordinator] exposed different people to Four Blocks and they decided to adopt it.) Their Four Blocks coach said, "It was her vision. She started it. We had been reading and she (the coordinator) had been taking us to conferences. ... With the research, the Four Blocks makes sense." A Grade 1 teacher at the school spoke of the adoption process by saying, "We decided to go from target assisted to school-wide. We had committees that were formed. We did a lot of soul searching; what are our strengths and weaknesses. We looked at what are the needs of inner-city schools and found at-risk students have different needs. How were we going to meet those needs? What does the research show? What we found was the research showed that a lot of success was found for the Four Blocks program. That got an interest." One principal at Delaware Elementary School said that at her school they used Title I funds to examine different programs and shared that research at staff meetings and in-services. They also hired substitute teachers so their teachers could meet. Another teacher outlined the importance of reaching a consensus in deciding to use Four Blocks by saying, "The entire faculty had to agree. We had to come to a consensus. That was a difficult thing to do when you have so many different personalities, people thinking I have the right answer. Well, research shows totally teacher-dictated paper and pencil just doesn't cut it any more. A lot of our kids just can't write. After addressing all that, we finally came to a consensus that this is what we wanted to do." The implementation of Four Blocks was gradual. One teacher spoke of this process by saying, "It is chopped now, but the earlier grades are all going to Four Blocks now. That will be K-3. They have Title I people for assistants. [We] want teachers to meet together and use Title I and assistants to cover classes for meetings. They are just beginning so they don't know how it will change them, especially the tried and true. Each year they [the teachers] will increase Four Blocks by one grade. We've got/want everybody on the same accord now. The first grade is on track, and Four Blocks is mandatory for those teachers. We spent a lot of time working with them. The second grade teachers have the option this year because they are less certain. Next year they will be required."

Implemented Theoretical/Philosophical Approach

The Four Blocks Method's implemented theoretical approach can be summed up by the following: different instructional methods yield different results; reading is complicated; and that only by using different methods (i.e., the Four Blocks) can the complexity of reading and literacy be passed on. And because children learn differently, the teachers felt they could reach all of their students by using all four blocks. It appears to have the following implemented theoretical/ philosophical approach features: creative writing, basal readers, phonics, Big Books, individual reading, and writing mechanics. A Grade 3 teacher who currently uses Four Blocks in her classroom illustrates how this philosophy is implemented by saying, "Right now what I do each day with my class: we start with approximately a 40 minute period. It is a writing period. Children write narratives and stories that go with what they are reading in their books. We use the writing process with all the steps. The second block of time is reading with the basal series. We do a lot of reading. We do a lot of phonics and vocabulary study [and] reading the story work (that deals with reading text book). The third block of time is making words we use Patricia Cunningham's making big words book. The boys and girls have cards that they work with; I will tell them to spell a word, and they spell it in a tray. We switch letters making new words. This ties in with their spelling each week. The fourth block of time is individual reading. We have four baskets of approximately a hundred books each. Students go to the basket that is on their table and choose a book to read and fill out a paper with questions about their book."

Another teacher spoke about how individual work with children is part of implementing Four Blocks. She said, "I conference with each child. It's very effective, because you learn what skills they don't know. How do they figure out words they don't know: do they rely on context, do they sound out words without it making sense, do they just go on? A few minutes of one-on-one time." The activities in each of the Four Blocks represent a balanced approach to instruction by placing an emphasis on writing and comprehension while including instruction in phonological awareness and decoding.

Professional Development Component

The method did not appear to have its own required professional development component. It could be argued that it does not need one as much as other programs that take innovative theoretical approaches, since this intervention is an organized collection of previous approaches. Conversely, without professional development, the likelihood of a consistent implementation of the framework could be jeopardized.

In order to implement Four Blocks, teachers attended workshops where they were trained in the method. Videotapes were also purchased to help supplement the training. Two teachers at one school worked half-time so that they could become trainers for all three of the Evansville Four Blocks Schools in the district. In addition, there were opportunities for teachers to receive additional training during in-service times. However, it seems as though many people felt that the interest of the teachers in learning the method and modeling were more important than training workshops. One Four Blocks trainer stated, "If you have people who are not in the philosophy, and not sold on the program, you need to provide more training and bring them along more slowly, provide more modeling. A good general overview is enough for a good teacher. The other thing is: the key is the modeling piece, whether you do it in your own building, through video, or go out, because there will be teachers who say I read that, but didn't know what it was talking about until they saw us do it. They had knowledge of it but it didn't click until they saw it."

In addition to training, formal communication and collaboration were important to learning the method. At this school site, formal communication was accomplished through cross-grade teacher meetings. The meetings helped teachers share information with the whole staff. Each person sat on a committee: language, math, family relations. Based on the committee's surveys, they presented in-services on teaching methods and data-based evaluations. One teacher discussed the formal communication at her school by saying, "We have grade level meetings each week. Title I attends and directs those meetings. We talk about what has worked well, things we're confused about and where we would need more information."

The Four Blocks program is well conceived, given that it recognizes the complexity of reading and provides a cohesive approach to reading intervention. However, very little research has been conducted on this method, and what exists is of low quality. (For instance, in the Cunningham, Hall, & Defee (1991) study, there was no between-groups comparison of students, and the design was not described well enough to allow for replicability. No statistical methods were used, and the article took an advocacy position. Findings indicated some improvement in decoding ability, though the informality of the evaluation methods prohibits any conclusions from being drawn.) Because it fits in with traditional classroom settings and has neither a professional development component nor a parent involvement, the Four Blocks Method could be a very inexpensive way to organize and structure reading instruction. More research needs to be done to determine the actual outcomes of the program.

Organizational/Structural Features

Though it is classroom-based, students are broken into four groups, and in the groups take turns at four different stations. Thus much of the work is done in small groups. Unlike Success For All, there is no Ability Grouping in Four Blocks: children of different abilities are put together, which leads to less ability-based social stratification (Cunningham, et al., 1991) and enables instructional features such as paired reading. Several teachers spoke of the lack of Ability Grouping as a real strength of the Four Blocks model. As for materials, students use both basal readers and trade books, the former providing controlled content, and the latter reinforcing comprehension and motivation through self-selected reading. Children use emergent spelling, a technique that emphasizes interaction with spelling rules rather than correctness. The room is a literacy-rich environment, providing ample opportunity to read and write. Teachers report use of both diagnostic procedures and ongoing written observation to monitor and guide students' progress. Teachers keep running records of each student for assessment. The stations are organized in such a way as to provide systematic learning.

Classroom Instruction Features

The diversity embedded in the Four Blocks approach is most visible through its Classroom Instruction Features:

- *Creative Writing*
- *Interpreting/Discussion*
- *Multisensory Activity*
- *Paired Reading*
- *Silent Individual Reading*
- *Storytelling*
- *Student Teams*
- *Workbooks*
- *Writing Mechanics*

Students in the Four Blocks program spend time learning in each of the Four Blocks. The Four Blocks are writing, reading with the basal series, making words, and individual reading. According to the interviewees, the word wall is what the teachers like most about the Four Blocks program. The teacher and the children work on five new words a week together. These words are then placed on a wall for the children to see and use in their writing assignments.

Features such as workbooks and writing mechanics provide the systematic practice with reading sub-skills needed for accurate reading. Other features are more meaning-oriented: silent individual reading, storytelling, and interpreting/discussion. Other features focus on the role of literacy in human communication, such as student teams, paired reading, and creative writing. Multisensory activities help internalize reading skills. The features thus work together to target an array of reading outcomes, and ultimately lead to supporting each other. This appears to be akin to what Clay calls a "self-extending system," in which different reading strategies accrete and support each other through practice, though such a concept is not spelled out explicitly in the literature.

Parent Involvement

Perhaps because it fits into the existing classroom setting, Four Blocks has no parent involvement features of its own. While schools may have existing parent involvement features, more thought could be given to integrating parents better into the system.

Parents were rarely mentioned by the interviewees in our look at Four Blocks. A Grade 1 teacher mentioned that, "The parents benefit indirectly. First many parents had a negative experience in school, and they develop a new positive relationship with school." She also mentioned that her school develops workshops for their parents; however, she did not comment on the frequency or the content of the workshops. In addition to the workshops, this particular school has a Parent Day to introduce Four Blocks and the school to families. In a carnival atmosphere, students must introduce their parents to their teacher as entry to the picnic. Parents are also involved with the children's homework.

Children are given books to take home and read. Parents are asked to sign off, confirming that their child has read the book.

Literacy Outcomes

The Four Blocks Method, primarily a Grade 1 intervention, systematically and explicitly targets a number of reading outcomes: comprehension, decoding, phonemic awareness, critical literacy, and writing.

In this school, they were using Four Blocks predominantly in Kindergarten through Grade 3, but teachers felt the writing component could flow right into junior high. According to the teachers, their students learn editing habits and the use of rough drafts at a very early age.

Conclusions: Four Blocks Site Visit

Overall, it appears that the educators in this school system were very positive about the Four Blocks method. Teachers described positive child involvement and that children were engaged in learning. One teacher noted an added benefit to the method: "The Four Blocks program has flowed into the special education classrooms. Those teachers have picked up on it, and it helps when they're going into the regular classrooms and for inclusion." They also report literacy gains. The Four Blocks coach stated, "In our scores we have seen huge growth. We track it by running record, Marie Clay's observation survey, word identification, sentence dictation. With those we've seen gains. We've shown major stanine gains...They can really see a difference in the writing. Making-words block learns words as a family, and you can see the students transfer it much more into their reading on a regular basis." Finally, many of the teachers summed up positive feelings in saying, "The students become readers and writers, and they develop so much self confidence. Self confidence does wonders for them."

While the lack of research makes drawing conclusions difficult, the intended links to literacy outcomes are sound. More attention could be paid to professional development and parent involvement, both of which could reinforce classroom instruction. It appears that the teachers at this school benefited from the collaborative nature of the Four Blocks process, and were satisfied with the progress their students are making.

Success For All

Success For All (Slavin, Madden, Karweit, Livermon, & Dolan, 1990) is an intervention designed at Johns Hopkins University to provide school-wide reform to

Baltimore's inner-city schools. This section provides a review of the features of the program and an assessment of the research base.

A comprehensive school reform model, Success For All has been adopted by schools nationally, in part because long term evaluations of the program continue to demonstrate its long-term success. Its central goal is to ensure that all students master the basics of reading, writing, and in some schools math and science the first time around, thus reducing retention and referrals to special education. While philosophies vary across schools, Success For All ensures its compatibility with individual schools by requiring that 80 percent of teachers and administrators sign their agreement to its implementation. In so doing, Success For All becomes the school's philosophy.

At the school described here, adopting a literacy intervention was a school wide process. Members from the entire school participated in evaluating different literacy intervention programs and eventually chose the Success For All program after visiting a Success For All school in Cincinnati. The school chose to use both the Success For All reading program "roots," and the Success For All math program "wings." Success For All passed at this school by a vote of 46-3 or about 94 percent. In discussing the adoption of the Success For All program, one Grade 2 teacher, said, "The whole school uses Johns Hopkins' Success For All. We all voted on that when we first decided to do it as part of our PBA [Performance Based Assessment] plan. It's been very successful so far and as far as I know we will continue using this program as long as we are getting success with it. And even the Kindergarten classes use the same program." Another teacher mentioned, "Every teacher is involved. They've even asked that even the art and music teacher get involved in knowing the themes that we are working with. If we are working with a certain theme, we can ask the art teacher to do something with that in art. We can ask the music teacher to help us with the songs."

Because a schoolwide program was preferred, the school had to select a program that would benefit all students. Because of the school's demographics, 94 percent of the students received free lunch, and they were a schoolwide Title I school. One teacher stated, "When I first came here I was a real proponent of Reading Recovery®. I just couldn't understand how they couldn't go with Reading Recovery® because I had learned a lot about that. But when I heard more about this program, I thought, well this is better because in Reading Recovery®, you only work with first grade students. Whereas in this program we work with students Kindergarten through 6th grade so all students are benefited by those moneys rather than just the first grade students and just a few." Thus, Success For All's ability to serve an entire school also seems to contribute to the school's commitment to the program.

Some of the features of Success For All that appealed to the school from the beginning were: it is research-based; transitions between the grades were covered well; everyone in the school can benefit from Success For All whereas in some high dollar programs such as Reading Recovery® only a few students are involved.

Implemented Theoretical/Philosophical Approach

In its attempt to reach every child at an early age, Success For All combines several different theories in its curriculum. In Kindergarten and Grade 1, it focuses on a developmental approach, with storytelling and dramatization of literature. It continues this meaning-oriented beginning throughout the curriculum, and thus also is informed by whole language. But Success For All also is designed to teach reading strategies and especially phonics explicitly, directly, and systematically. Finally, Success For All also makes use of thematic units in its curriculum, an approach that is both content-oriented and, by virtue of its multi-faceted orientation to a single topic, accessible to students with a variety of strengths and interests.

Professional Development Component

A "program facilitator" leads Success For All implementation at each site. This facilitator (a certified specialist) is responsible for guiding program implementation and professional development throughout the program. Professional development consists of an ongoing series of topical in-service sessions. Teachers are also provided with manuals that integrate the Success For All philosophy with daily classroom practice. In addition to organized in-service sessions, the facilitator also organizes informal sessions where teachers can share experiences and talk about specific concerns. In this way there is opportunity for networking and ongoing support.

After the adoption of Success For All, everyone at the school had five days of training. The Title I / Success For All Coordinator said, "I went into training thinking this would be like any other textbook adoption...and a little into it I knew I was into something deeper." New teachers were also given training in the Success For All methods.

Staff meetings were complex. As one teacher explained, "The school has a complex structure of same-and multi-level meetings. They have biweekly staff meetings. They have meeting forms, and they keep track of and distribute minutes." There were also regular sessions of internal professional development which included grade level meetings (one per month) and component level meetings. Teachers were also involved in special leadership committees. These committees met on a monthly basis. Monthly reading meetings were also held. At staff meetings each grade level made a presentation on what they are doing. Each grade level also established goals and shared them with all of the teachers. In addition, teachers felt that there was a lot of informal communication. Both the formal and informal communication seemed to ensure that everyone stayed involved with Success For All.

In addition to the formal training in Success For All that teachers receive, Johns Hopkins University also provided additional support and training. One teacher commented on the support provided, "They come three times a year to talk to us and if they feel we need more training and in the summertime we can always go and take more training. At least the last few summers, more training has been available to us if we felt we needed it."

The school had a support staff of two facilitators and a secretary to help administer Success For All. A teacher spoke of the importance of the support staff in the Success For All program, "I think all three of them are important. They run all the time, they always make sure we have materials. They have materials available. Like yesterday, I knew I needed a big book so I came down here and I knew right where it was so I checked it out. If I'm not able to find it, I put a note in their box and they're very willing to get it. If I need something else, say like I've had a problem with a student in reading, and I put a note in their box and they come and we talk about it. They're good listeners. They are also very willing to help out if we're having a problem."

Johns Hopkins conducted evaluations of the implementation of Success For All during the school year. These evaluations occurred three times the first year, twice the second, and once a year thereafter. Many of the teachers we talked to felt that these evaluations were "candy coated" and wished that they would be more critical one-on-one and help her to do her job better. She felt that the evaluators did not spend enough time, and the fact that there was a different evaluator each time was a weakness of the evaluation by Johns Hopkins. Phone support by Johns Hopkins was also provided in the form of an 800 number. Success For All has an annual regional conference, which is attended by 10-15 Harrison teachers annually. In addition, Johns Hopkins offers optional summer training for facilitators.

Organizational/Structural Features

There is a considerable amount of restructuring with Success For All. During most of the day, schools remain in the conventional grade format, using classroom-based instruction. But for 90 minutes a day, children are reorganized into Ability Groups. Thus, a Grade 1 student and a Grade 3 student may be in the same class, provided that they have roughly equivalent skills. This represents an effort to teach everyone without requiring too much one-on-one tutoring. One-on-one tutoring is also available, however, to those (especially Kindergarten and Grade 1) students, who are still not achieving satisfactorily in their groups. The group uses frequent diagnostic procedures, approximately once every eight weeks, coupled with ongoing written observations in an ongoing effort to meet children's needs. One of Success For All's distinguishing features is its comprehensive approach to systematic learning, and it employs both basal readers as well as trade books to guide decoding and comprehension, respectively.

The main structure involves teachers, instructional aides, and tutors. Students are grouped to read by ability and students who need extra help are pulled out to work with tutors. The students who are pulled out are chosen by tests and teacher observations.

Every day there was 90 minutes of reading at this school. A Grade 2 teacher talked about this time by saying, "There can be no interruptions, no speakers, no assemblies, nothing during our reading time. The children, I think, are not as frustrated because they know everyone in my class has my individual attention that 90 minutes." Many of the teachers wished that math was also always taught at the same time each day without interruptions. They believed that the school would probably move in this direction. One teacher believed that the structure of Success For All helps children be successful. She said, "Success For All is good for at-risk children. It's very much you do the same things at the same time every day so the children know what to expect. There is a lot of cooperative learning with it. There is homework every day with it, [and] a lot of writing. A Kindergarten teacher expanded upon this idea of the structure of Success For All by saying, "I think organization and repetition is something that is lacking for a lot of these kids and that program really has it. I think they need a lot of structure and they don't get structure. This program is definitely structured and I think it is good for them."

Many teachers talked about the structure of the Success For All classroom as sitting around tables or in groups. They said that the result of sitting in groups led them to structure their other classes in the same way. One teacher summed up this viewpoint: "We were a rows and aisles type of school and now we are cooperative learning; it's amazing to me."

In addition to a restructuring of the physical nature of the school, teachers also spoke of the consistency of the program through the program and assignments. For instance one teacher said, "We all use the same basal. First grade uses the pre-primers that Johns Hopkins has written." This same teacher saw advantages in the consistency with assignments for the children when she said, "But the whole school, everybody does homework, has the same homework sheets, everybody does meaningful sentences, everybody has adventures in writing so when brothers and sisters go home, they all have story tests on Friday, not including the first grade, but then at most schools the first grade a little bit different because they're just learning to read. But from the second grade reading program up through sixth, the same vocabulary is used; the same textbooks/basals are used. It goes together very well, so parents can hear the same kind of vocabulary from all of their children."

Many of the teachers also spoke about how they evaluated children in the Success For All program. The evaluation of the children determines their Ability Groups. A teacher spoke of the way children were evaluated and placed in groups by saying, "We give them reading tests and they are put in the reading level where they belong. And as they grow, every eight weeks we give them another test. Those that are in the first grade reading level are given an oral test, an individual test and those above that are given a formal assessment that is done by the Houghton-Mifflin program. So that if they find a student has just kind of picked up and grown, they've taken a spurt, they will put them up in reading. Johns Hopkins does not like students to be put back a level, but for some students it has been done.

One teacher spoke about Success For All creating an empowering environment that teachers emphasize. According to her, the program uses "daily affirmations and emphasizes the power of choice: the power to choose to study, or to choose not to get into trouble." Success For All also used a "student of the day" technique, in which teachers recognize a student for something every day. Teachers also tried to recognize each child and not focus on two or three outstanding students.

Classroom Instruction Features

Success For All used more instructional features than any program analyzed in this study. Its developers recognized that reading and literacy acquisition is an enormously complex activity and thus built in a tremendous variety of instructional features to cover a gamut of literacy outcomes. These features include the following:

- *Big Books*
- *Student teams*
- *Creative writing*
- *Meaning context/predicting*
- *Paired reading*
- *Silent individual reading*
- *Storytelling*
- *Cooperative learning*
- *Drama*
- *Multisensory activity*
- *Writing mechanics*

These features illustrate that despite the heavy emphasis on direct instruction, an approach often espoused by phonological awareness advocates, Success For All also emphasized meaning and comprehension throughout. Note also the balance between reading and writing features. Writing was used to promote facility with phonological rules, addressing the need to develop strong reading sub-skills. Cooperative learning was a key part of Success For All.

For example, in one classroom, the teacher and the children read together from a book. While reading from the book the teacher asked questions about the book and used predicting and the sounding out of words. Then children paired up to read the same book to each other. When children had difficulty with words they helped each other sound out the word. While the children were reading, the teacher and tutors circled the room to help the children. Then the teacher had a group discussion about the book. In another classroom, the same process took place and, in addition, children were divided into groups to work cooperatively at tables.

Parent Involvement

Parent Involvement receives considerable attention in Success For All schools. Optimizing learning for children means ensuring that the home is not only conducive to learning, but also reinforces schoolwork. To this effect, the program provides guidance counselors, social workers, and the like to monitor student attendance, to provide parent skills training and to promote parent awareness. Success For All even provides family support if problems at home are interfering with a child's progress.

The Success For All program employed two social workers to work with children and their families. Once a month the school sponsored "Cup of Coffee." This was a time for parents and teachers to get together and talk. One teacher talked about the success of the parent component of Success For All when she said, "The parents have totally bought into this, and I think it's because we send home reading every night. I'm sending home one book a week and the children are making their own library at home and the parents have to send back a slip about their child's reading of that book, and they are all really excited. 'My other daughter could never read in Kindergarten and 'so-and-so' is already reading and it's only October.' Even though it is a memorized, going-through-the-motions of reading, the parents are really excited. I had 100 percent participation in conferences. I've seen a real difference in that."

The teachers worked hard to try to keep parents involved in the Success For All program because they felt it was important to the success of the program. However, they often found that staying in touch with the parents was difficult. The Grade 2 teacher mentioned that, "The parents that we work with, it is hard to get them to come into school. The one thing is that they work, some of them work two and three jobs. Most of them are single parent households. Usually they have more than one child and it seems to be difficult for them to get into the school building. I find with their homework, this program has a very good homework component. This year my children are very good about having their parents read to them and then sign their homework sheet. In that way, parents are doing a good job, I think, as far as my reading class goes."

Unfortunately, the parent component of Success For All adds additional constraints on the teachers' time. According to one teacher, "The one negative is … every grading period, every nine weeks we were to have time off for conferences with our parents so we could talk about reading. They haven't been real excited to give us that half a day because we would have to go into the evening or give us a day to talk to the parents. It seems to be a hassle whenever that time comes around, but other than that, everything seems to be okay."

Literacy Outcomes

Success For All leaves little undone. It has been criticized for its heavy emphasis on phonics (Tierney, et al., 1995), and the directness of instruction precludes attention to other aspects of reading, such as critical literacy. But Success For All is an avowed "basics" oriented program, and it targets the remaining outcomes—emergent literacy, decoding, and comprehension—thoroughly.

Conclusions: Success For All Site Visit

Teachers at this school were very enthusiastic about the outcomes of Success For All. According to one of the leaders, the children now "enjoy" reading and are "excited about reading." She gave some examples of former (and still) problem children who requested certain reading activities. Her point was that children are now taking the initiative to read, and the goal of children taking their education into their own hands is being realized. Another teacher summed up the teachers' feelings by saying, "They learn to read and write, and I think they learn to enjoy reading. It's really fun in second grade to have come about at this time of year. … A little after Christmas the kids say, 'I can read that.' Now they're just starting to read the menu off our daily menu, and they look at the walls and see a word and say, 'I know that word.' It's a fun part of teaching. If they get their work done and they come to you and say, 'Can I get a book to read?' 'Well sure.' They don't say, 'Can I get a piece of paper and scribble on it?'"

School Designed Early Literacy Program: "Kids' Place"

Many programs funded by ELIGP are locally designed. One such program is called Kids' Place. This hybrid program draws from ideas in literacy collaboratives created through the mixture of many different literacy intervention methods. A Grade 1 teacher said that Kids' Place was "one teacher's initiative. She had some college courses and wrote a grant." The original plan was to implement the Kids' Place program throughout the school.

Implemented Theoretical/Philosophical Approach

The implementation and philosophy of the Kids' Place program bears some resemblance to the Literacy Collaborative program. First, individual student need seems to be a part of the Kids' Place program. The lead teacher demonstrated this when she said, "We really truly go with the kids; for instance, this year's kids are more auditory than visual, so this year they are adjusting to meet that need. Thus for this year we have used only one worksheet." Students in the Kids' Place program were allowed to participate in the selection of reading material. In observing the Kids' Place program, we saw a group of children and a teacher decide together what they would like to read. In addition to decision-making on the basis of student need, we also observed small group instruction and shared writing which are features of the Learning Community aspect of Learning Collaborative. According to the teacher, the curriculum and instruction used by the Kids' Place program related to Vygotsky's (1980) theory of scaffolding. References made included: "We base a lot on Vygotskian scaffolding" and Kids' Place learning centers "allow Vygotskian individual attention."

The children in the Kids' Place program had a schedule of activities that was followed each day. This schedule included breakfast, independent reading, identification of the date, a short literacy activity, a short math activity, a game, reading aloud and an extension (e.g., interactive writing, reading a class book), "Music and Movement" (e.g., teaching letters, sounds and reading strategies through pre-recorded music), learning centers, "author's chair," writing and manipulative activities.

Professional Development Component

The Kids' Place program does not seem to have a professional development component. However, one teacher attended a Learning Collaborative workshop and some of the teachers who work with the program have been trained in Reading Recovery®. According to one teacher who had been to almost all the workshops, the "Kids' Place people offer workshops open to all teachers. They talk about what they do, what has worked, and what didn't work." Although Kids' Place offers workshops to referring teachers, these workshops are not for training but rather to inform the teachers about the program. It would probably be more accurate to call the workshops information sessions.

Organizational/Structural Features

The Kids' Place Program consisted of thirty children, two teachers, one coordinator, and two aides. In the program there were four kindergartners retained; the rest were "assigned first graders." After breakfast they broke into their two classes, then they broke into three classes for literacy groups. During the day the children work in learning centers with music and movement and reading. The thirty lowest children in the district are pulled out of their classes for most of the day and attend Kids' Place. At the end of the day these children are then returned to their regular classrooms. The thirty lowest children are selected by their Kindergarten teacher's recommendation and scores on the Reading Recovery® Observational survey. This pullout feature has been the source of some criticism. According to one teacher, "For the children that are selected in Kindergarten, it is such a privilege. I hear criticism but these little people get so much help, I don't understand why there is so much criticism. It is so exciting when they come back and see them be successful. I remember a new little guy reflecting and writing on the calendar." Usually about seventy children were recommended. The selection was made in the last month of school. The Observational survey was given every four weeks to the Kids' Place children. Once the child achieved a certain score, he or she was sent back to the home school. Once one child returned to his or her home school, Kids' Place took the next child on the list. One teacher felt that Kids' Place "helps the Reading Recovery® program since Kids' Place takes the lowest thirty. Reading Recovery® can take thirty-one to forty of the next lowest level." According to another teacher, Kids' Place does not follow the "basal program, but they pull out stories at the children's level. They have made their own books, using vocabulary and experiences that will mean things to the children."

Classroom/Instruction Features

The teachers at Kids' Place have background in both Reading Recovery® and Learning Collaborative, and have drawn from those programs to create Kids' Place. Kids' Place includes many of the features of these programs, including:

- *Big Books*
- *Creative Writing*
- *Drama*
- *School/Choral Reading*
- *Essays*
- *Multisensory Instruction*
- *Pacing Oral Reading*
- *Paired Reading*
- *Silent Individual Reading*
- *Storytelling*

Project staff observed both guided reading and paired reading in the Kids' Place program. The children also read books that they could take home and created their own classroom books with the teachers. The classroom was a literacy-rich environment. For instance, there were environment posters all over. One poster labeled "Red Things" had the words "fire truck", "apple", etc. written on it by the children. On the poster labeled "--ing Words" the children wrote "finding", "stomping", and "trading." In another activity the teacher said a word and the children chose magnetic letters from a pile in the middle of the table and spelled the word on a tray. In this way Kids' Place extends the Learning Collaborative philosophy by addressing emergent literacy.

Students spent time at learning centers as well as in groups. Students were required to complete approximately ten learning centers per week. The learning center activities included: creative composition on the computer (pictures and words), making words, building blocks following patterns, matching pictures to sentences, and a bingo-like word recognition game.

Parent Involvement

The parent involvement feature was not examined at this site visit.

Literacy Outcomes

It is possible to outline intended literacy outcomes based on research in Literacy Collaborative programs because Kids' Place draws heavily on the Literacy Collaborative themes. Literacy Collaborative focuses on Decoding B (meaning-oriented decoding) and comprehension. The Literacy Collaborative also clearly places priorities on moving from simple decoding to reading comprehension and writing. The strength of this approach is that it provides a well-designed bridge to move students through various stages of literacy, using a variety of techniques that reinforce each other. The program reduces the emphasis on critical literacy as compared to whole language programs, by guiding students from simple decoding toward critical literacy with systematic practice in different kinds of reading and writing.

Conclusions: Kids' Place Site Visit

Everyone that we interviewed about the Kids' Place program felt that it was a wonderful program. One teacher spoke about students that have gone to Kids' Place, stating that they "went in very low and accelerated greatly from the extra boost." She also reported that Kids' Place was successful in laying down a developmental foundation for the students in the program. Another teacher stated, "They take these little people who have low esteem and help them. Kids feel safe, comfortable and there is a lot of support of central office."

Kids' Place indeed represented a literacy-rich program that was student-centered and provided a strong emphasis on a combination of key literacy skills. Its similarity to Learning Collaborative programs suggested a strong theoretical base for interventions. However, the lack of more prescribed, systematic decoding instructions may negatively impact some students. The low student-staff ratio allowed for more frequent use of individualized instruction. The pullout feature, however, demonstrated similar limitations of pullout programs in general (i.e., students lack normally achieving models, and miss out on the curriculum in their general education classroom). This is particularly troublesome when many, if not all, of the classroom features described could have been integrated into the general education classroom.

Summary of Case Studies

Some key themes emerge throughout the site-visit summaries included here. In each of the sites, teachers not only stated positive comments about the programs, but expressed a relatively strong belief in the success of the programs prior to their implementation. In all these cases, teachers researched interventions and made informed decisions about what would work best for their students at their schools. The level of buy-in to the belief the programs would work reduced the resistance to change commonly observed in systemic education reform (Fullan, 1993) and contributed to the teachers' positive response to innovations.

A second key element observed from these site visits is the use of networking and collaboration to support program development and systematic change. It was clear that the ELIGP funding, in combination with other remedial program funding, contributed to the number of opportunities available for teachers to visit other programs, hold planning meetings, and conduct peer observations. Teachers reported that these opportunities were an important part of their decision-making process and increased the likelihood of implementing the programs competently.

All three programs focused on critical literacy skills—decoding, comprehension, and writing. However, both Four Blocks and Kids' Place placed less emphasis on systematic, direct-instruction on basic decoding and sight word skills. In each of these programs, the teacher determined how much of each program would be integrated into their curriculum, unlike Success For All which provides a more prescribed approach. At the same time, students participating in programs that have been somewhat redesigned to "fit the needs" of a particular teacher may not reap the benefits proclaimed by the program description due to the lack of teacher implementation. The three programs, which project staff visited, appeared to provide students with innovative and research-based early intervention programs. These programs appeared to have been implemented on a foundation of shared decision-making and a strong belief in the success of the programs to meet the expected outcomes. The potential for these programs to meet the needs of students at-risk for failure in reading was clearly present.

CHAPTER V

UNDERSTANDING OUTCOMES

A major claim of the Reading Recovery® program has been that students who complete the process are less likely to be retained in grade level or be referred to special education. Students who are referred for special education assessment or retained are typically the lowest achieving students in a school. In most cases, they are referred or retained because of deficits in literacy skills. Problems with reading and writing carry over into all other curriculum areas and are magnified as students reach the upper grades. The significant costs related to both special education services and grade retention provide an incentive for schools to find ways in which to address the literacy skill deficits of students who are the lowest achieving and most at-risk. The early literacy programs funded by ELIGP have the potential to accelerate the progress of students at-risk, and support the teachers who work with them. A reduction in special education referral rates and retention are indications that the literacy deficit of the students most at-risk is being met by the early literacy programs.

This chapter presents the preliminary analyses of outcomes for 1997-98. First we review changes in students completing Reading Recovery®; then changes in special education referral and retention are examined. Finally, we consider the financial impact of the program.

Students Completing Reading Recovery® Programs

The Early Literacy Intervention Survey developed by the Policy Center asked school representatives to report on the number of students that had completed Reading Recovery®. Of the survey respondents, there were approximately twice as many schools providing Reading Recovery® programs in Indiana in 1998 compared to the number of schools providing Reading Recovery® in 1996 (Table 5.1).

The mean number of students receiving at least one lesson per school increased by approximately five students (60 percent) between 1996 and 1998. This number represents 18 percent of the Grade 1 students enrolled in schools with Reading Recovery® in 1998. Clearly the 1997-98 ELIGP funding had an impact on the scope of the Reading Recovery® program. This is a substantial percentage of early elementary students, indicating that many schools in Indiana are at, or were near, the goal of serving 20 percent of students.

In 1998, five percent of students who completed Reading Recovery® were retained in Grade 1, and 23 percent were referred for special education assessment. If we assume that Reading Recovery® serves approximately 18 percent of the lowest achieving students enrolled in Grade 1, then approximately 28 percent of the lowest 18 percent have already received an extensive pre-referral intervention in Reading Recovery®, and are more appropriate candidates for either retention or special education assessment than are students simply nominated by teachers.

Table 5.1 Mean Number of Students Completing Reading Recovery® Programs (1997-98 Survey Respondents)

		1996	1997	1998
Had Reading Recovery®				
	Number[1]	66	85	112
	Mean	7.2121	10.1059	12.8036
	Standard Deviation	7.7945	7.4674	7.5634
Received at Least One Lesson				
	Number	65	91	131
	Mean	8.4154	11.2418	13.7863
	Standard Deviation	7.7114	6.9191	7.6037
Completed Reading Recovery® Lessons				
	Number	66	91	132
	Mean	6.1970	8.3846	9.9545
	Standard Deviation	6.3469	5.7422	6.1556
Completers Still Enrolled in the School				
	Number	64	88	129
	Mean	4.5156	6.2500	10.0388
	Standard Deviation	5.5061	4.9625	1.4495
Completers Retained in First Grade				
	Number	65	88	131
	Mean	.1846	.3864	.4885
	Standard Deviation	.4966	.7019	1.0478
Completers Referred for Special Education Assessment				
	Number	65	87	130
	Mean	.8462	1.2644	1.4308
	Standard Deviation	1.2277	1.3247	1.7606

[1] Refers to number of schools responding to survey items.

Trends in completion rates are illustrated in Figure 5.1. Not only does this illustrate growth in the number of students completing Reading Recovery® lessons across the three years, but it also illustrates that the number of completers who were retained or referred for special education did not increase as rapidly as did the average number of completers.

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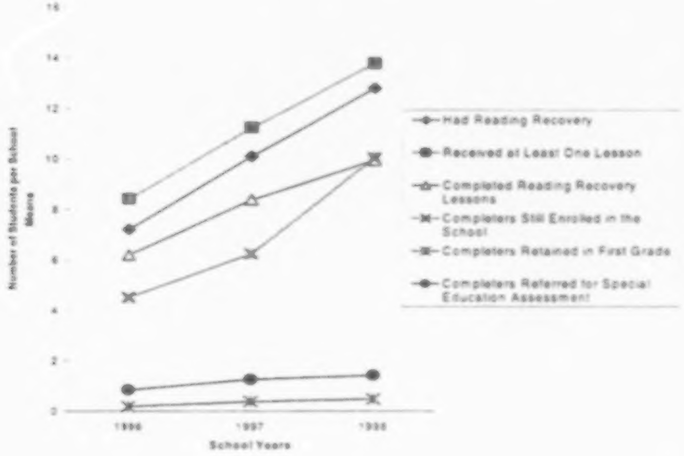
Figure 5.1 Trends in Completion Rates: Reading Recovery®



Trends in Special Education Referrals, 1996-98

Primary grade students who are identified for high-incidence disabilities, primarily learning disabilities, are more often than not identified because of deficits in reading. These students are most often identified in Grades 1 through 3, when academic failure can be fully documented. Because of variability in school programs, student background, and inconsistency in identification procedures, schools may differ greatly in the number and characteristics of students identified as having a learning disability. Researchers in special education have theorized that the rate of referral to special education assessment and eventual identification is a consequence of both student skill deficits and the "instructional tolerance" of a school (Gerber, 1988; Gerber & Semmel, 1984). The theory reflects the legitimate constraints placed on a teacher given the number of students, heterogeneity of student ability, amount of instructional time, teacher-to-student ratio, level of expertise, and resources. Often, realizing that there is little time, expertise, or resources to help students at-risk for reading failure, teachers refer students for special education assessment. Many of the early literacy programs evaluated here are designed to assist students at-risk for reading failure so that they will not require special

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education. They also are designed to change classroom features in such a way as to increase the instructional tolerance in a school program. A positive outcome to be expected from these funded programs is a reduction in special education referral rates.

The data in this portion of the study were collected from the Early Literacy Intervention Survey[15], in which administrators were asked to provide the number of referrals for special education assessment and grade retentions. While principals or their representatives in 349 elementary schools responded to the survey, not all supplied the requested referral and retention numbers. Table 5.2 provides information on the number of responses received. Because of the relative amount of missing data for referral and retention rates, interpretations should be made cautiously.

Table 5.2 Percent Rate of Referral for Special Education Assessment

		Rate of Referral for Special Education Assessment	
	1996	1997	1998
Reading Recovery*			
Number	33	36	44
Mean	3.73	4.08	4.75
Standard Deviation	2.17	2.16	2.91
OELI			
Number	34	32	41
Mean	4.27	3.58	4.38*
Standard Deviation	3.32	2.52	3.51
Comparison Schools			
Number			
Mean	95	97	108
Standard Deviation	4.12	4.06	4.87
	2.32	2.26	2.47
Missing Values			
N	176	172	144

*p<.05

Referral Rates in Funded vs. Comparison Schools

Referral rates in both Funded and Comparison Schools increased by almost one percentage point between 1997 and 1998. As a whole, Funded Schools were less likely to refer students for special education services; however, the difference did not reach statistical significance (Fig. 5.2).

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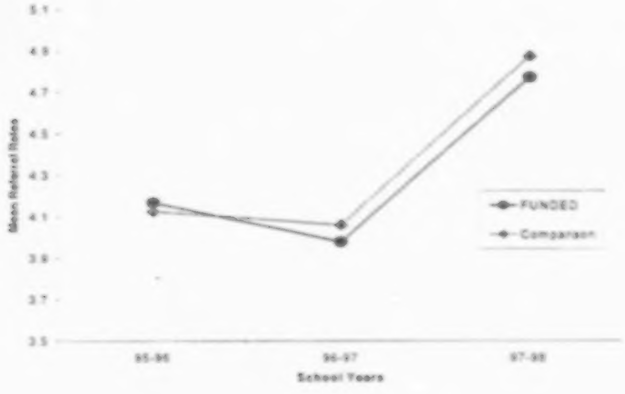
[15] See Chapter III for a description of the survey.

Figure 5.2 Special Education Referral Rates: Funded and Comparison Schools



Reading Recovery® schools referred fewer students for special education than Comparison Schools in 1996, but made a relatively greater increase over the next two years (Table 5.2 and Fig. 5.3). In 1997 there was an equal number of referrals for special education in Reading Recovery® and Comparison Schools, while in 1998, again, after the first key funding year, special education referral rates were less than in Comparison Schools. These differences in referral rates were small, however, and not statistically significant. While Reading Recovery® programs may serve to support students at-risk of reading failure, their screening process in early Grade 1 may also serve to intensify teachers' scrutiny of students who are then referred for special education assessment at a younger age than if Reading Recovery® was not in place.

While special education referrals were greater in OELI schools than in Comparison Schools in 1996, they were significantly lower than Comparison Schools in both 1997 and 1998 (Table 5.2 & Fig. 5.4). This may reflect both the impact of ELIGP funding and the anticipation of ELIGP funding. That is, teachers may have anticipated the development of an alternative to special education the following year to accommodate students exhibiting reading difficulties. It is also possible that programs may have been underway, and ELIGP funding served to provide continual support or expansion of that program rather than program initiation. The difference in impact on referral rates

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Figure 5.3 Special Education Referral Rates: Reading Recovery®

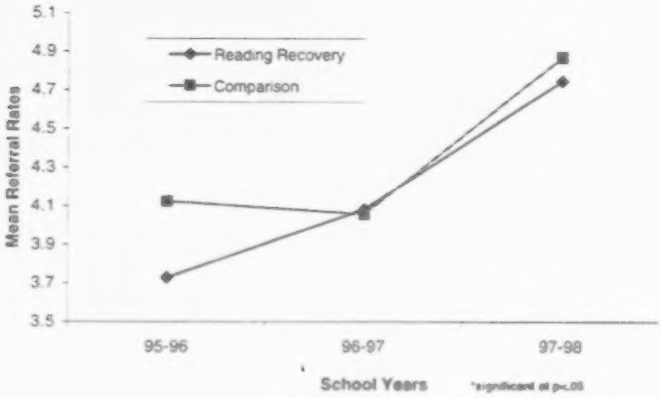
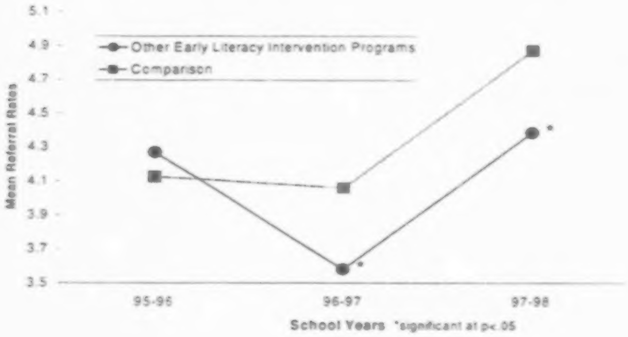


Figure 5.4 Special Education Referral Rates: Other Early Literacy Intervention Programs



between OELI and Reading Recovery® schools may be accounted for by the fact that OELI programs tend to focus on a broader range of students within the general education classroom (as opposed to individualized pullout instruction in Reading Recovery® programs). The practices in OELI programs may more broadly affect classrooms, which in turn increases the instructional tolerance in that classroom environment.

Regression Analysis of Rates of Referral for Special Education Assessment

Multiple regression was used to analyze the relationship between the ELIGP funding of Reading Recovery® and OELI programs in the first year of the program, 1997-98. Regression analysis allows for an examination of the relationship between key variables while accounting for other factors which may also predict outcomes. For instance, 1996-97 referral rates may help to explain the variability in referral rates in 1997-98. For these regression models, Percent of Students not Receiving Free Lunch (% Not Free Lunch), Referral rates in 1996-97 (Referral Rates 97), and ELIGP funding of Reading Recovery® Programs and OELI Programs (OELI) were entered as predictor variables with Referral Rates in 1997-98 (Referral Rates 98) as outcome variables. Reading Recovery® and OELI variables were "dummy coded", so that the existence of the program = 1, Comparison Program = 0. Results suggest that Reading Recovery® was not a significant predictor of referral rates (Table 5.3). OELI, on the other hand, was a significant negative predictor of referral rates (Table 5.4). That is, schools with OELI programs were more likely to have fewer referrals for special education assessment than Comparison Schools.

Table 5.3 Multiple Regression of Reading Recovery® on Rates of Referral to Special Education

	B	SE B	Beta	Significance
Constant	.023	.010		.031
% Not Receiving Free Lunch (SES)	-.008	.012	-.040	.544
Referral Rate 97	.718***	.066	.697	.000
RR	-.002	.003	-.044	.504
				R = .704***
				R^2 = .495
				Adj. R^2 = .483

*p<.05, **p<.01, ***p<. 001

Table 5.4 Multiple Regression of OELI on Rates of Referral to Special Education, 1998

	B	SE B	Beta	Significance
Constant	.027	.009		.004
% Not Receiving Free Lunch (SES)	-.014	.010	-.083	.178
Referral Rate 97	.731***	.064	.704	.000
OELI	-.007*	.003	-.138	.027
				R = .745*
				R^2 = .555
				Adj. R^2= .544

*p<.05, **p<.01, ***p<. 001

Summary of Trends in Referrals for Special Education Assessment

The ELIGP funding of OELI programs appears to have impacted referrals for special education assessment. Schools with OELI programs have a significantly lower rate of referrals for special education assessment than Comparison Schools. This relationship persisted even after accounting for socioeconomic status of schools (i.e. percent of students not receiving free lunch) and pre-funding referral rates.

Trends in Retention Rates, 1996-98

Retention, or being held back in a grade, is a measure of actual school performance. Researchers have viewed such measures as concrete indicators of whether a child has performed acceptably (Bronfenbrenner, 1979). Grade retention is used for a wide variety of characteristics of children. Most children are retained for academic failure, but other characteristics cited include social immaturity, adjustment difficulties and excessive absenteeism (Lazar & Darlington, 1982). Appropriate, early intervention can prevent the delays that can result in retention. Retention can also be an indicator of the adaptability of the instructional environment. Similar to the argument made for referrals for special education assessment, classroom environments with greater instructional tolerance to individual differences for students are less likely to retain low achieving students. Grade retention is also sensitive to local and state policy related to social promotion. One indicator that ELIGP funded programs contribute to literacy outcomes for students at-risk is a reduction in grade retention.

Like Referral Rates, data in this portion of the study were collected from the Early Literacy Intervention Survey, in which administrators were asked to provide the numbers of retentions during 1996-1998. With these data, each school's retention rates were calculated for the three years. The use of K-1 transition classes was also included in the retention rates (Fig. 5.5).

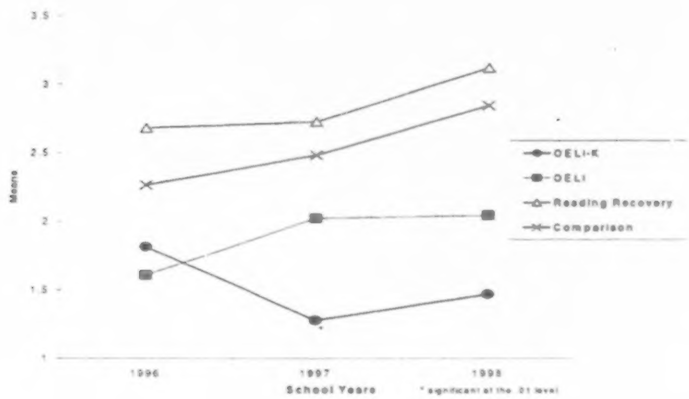
Retention Rates in All Funded vs. Comparison Schools

Retention rates in both Funded and Comparison Schools increased by less than one percentage point between 1996 and 1998. (Table 5.5). As a whole, Funded Schools were less likely to retain students than Comparison Schools; however, the difference did not reach statistical significance.

Table 5.5 Retention Rates for Funded and Comparison Schools

	1996	1997	1998
OELI			
Number	35	35	42
Mean	1.61	2.02	2.04
Standard Deviation	2.48	2.30	2.17
Reading Recovery®			
Number	38	43	48
Mean	2.68	2.72	3.12
Standard Deviation	2.44	2.80	3.01
OELI-K			
Number	11	12	12
Mean	1.81	1.28	1.47
Standard Deviation	1.81	.80	1.53
Comparison			
Number	88	90	95
Mean	2.26	2.49	2.85
Standard Deviation	2.29	2.45	2.51

Figure 5.5 Retention Rates by Program Type, 1998



Reading Recovery® schools retained students at a greater rate than Comparison Schools in all three years. However, the difference did not reach statistical significance (Fig. 5.5). Retention rates were lower in OELI schools than in Comparison Schools during all three years, however, the difference did not reach statistical significance (Fig. 5.5). These three types of programs were grouped because of their focus on children prior to Grade 1. The retention rates were lower during all three years. The difference was significant in 1997 and approached significance in 1998 (Fig. 5.5).

Regression Analysis of Rates of Retention

Results of multiple regressions (Tables 5.6 and 5.7) suggest that neither Reading Recovery® nor OELI were significant predictors of retention after accounting for SES and 1997 retention scores. The number of schools in the OELI-K group was too small to run a regression.

Summary of Trends in Grade Retention

There is an indication that OELI-K programs (those focusing on Kindergarten and Pre-school) have less retention and use of transition classrooms. This suggests that the ELIGP funding has some impact on the rate of grade retention. ELIGP programming may impact the academic and cognitive development of students so that they do not require an extra year of programming. Because these differences only approached significance, they are not conclusive and require further study.

Table 5.6 Summary of Multiple Regression Analysis of School Factors and Reading Recovery® Programs on Grade Retention (N= 165 Schools)

	B	SE B	Beta	Significance
Constant	.951	.810		.243
% Not Receiving Free Lunch (SES)	-.067	.985	-.004	.945
Retention Rate 1997	-.695	.061	.727	.000
Reading Recovery®	-.06	.330	-.011	.863

R = .727***
R^2 = .529
Adj. R^2= .517

Table 5.7 Summary of Multiple Regression Analysis of School Factors and OELI Programs on Grade Retention (N= 158 Schools)

	B	SE B	Beta	Significance
Constant	.427	.559		.447
% Not Receiving Free Lunch (SES)	.334	.660	-.028	.614
Retention Rate 1997	.779	.053	.812	.000
OELI	-.404	.288	-.077	.164

R = .820***
R^2 = .672
Adj. R^2= .663

Understanding Financial Impact

Rates of referral for special education assessment and grade retention were used as indicators of the impact of ELIGP programs on the lowest achieving students in schools. Improved early literacy interventions could potentially affect referrals and retentions in two ways: by increasing the literacy skills of students and by providing teachers with the skills and support required to teach students at-risk. The findings in this chapter suggest that the ELIGP funded OELI programs have served to reduce referrals to special education assessment. Retentions were also lower in both OELI and OELI-K programs, but the findings were not conclusive and require further study. Referrals and retention rates in Reading Recovery® programs were similar to Comparison Schools. Further research should be completed examining these indicators in Reading Recovery® schools, particularly as programs become more fully established.

The state of Indiana initiated the ELIGP in 1997-98, a year before the implementation of the *Reading Excellence Act*, a national reading intervention program that promotes research-based improvements similar to those funded by Indiana's program. This impact study has made an initial in road into building an understanding of the impact as a public investment.

It is important to acknowledge that reductions in student retention and special education referral (and identification) translate directly to savings in state funding of regular education programs. Each student retained in early primary grades cost the state and districts $4,387 in 1998-99.[16] In this study we found that OELI schools funded in the ELIGP had a significantly lower referral rate (a difference of one half percentage point), a difference that was influenced by program funding. Thus, the interventions that reached out to all students in early primary grades resulted in direct cost savings to the state. These direct, within-year savings partially compensate for the direct costs of the program.

Further the OELI funded schools had a direct effect on reducing special education referral. The average state costs for serving students with learning disabilities ranges from $1,522-$2,577 a year[17]. Students identified for special education have ongoing annual costs, as these students usually stay in special education for many years. Thus reductions is special education referrals provides cost saving for several years in the future.

The Reading Recovery® program did not have these direct effects. However, the schools that undertook Reading Recovery® had lower SES status, which may explain why they were less likely to result in measurable improvements. Further, most schools receiving support for training in Reading Recovery® in 1997-98 had previously implemented Reading Recovery®, so they could have realized initial returns from their initial investments before the study period. Thus, the Reading Recovery® component of the program merits further study.

These improvements in educational outcomes appear to be related to changes in the instructional programs in Indiana's elementary programs. These new projects were implemented in schools that had strong, balanced approaches to reading instruction incorporating both systematic and literature-rich approaches. Further, funding by ELIGP increased the use of balanced approaches to instruction that have a direct impact on the learning opportunities of all children.

In conclusion, the Early Literacy Intervention Grant Program had a substantial and direct impact on critical educational outcomes – outcomes that have a substantial direct impact on reducing the costs of education.

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[16] Based on student funding formula. Source: Indiana DOE.

[17] Based on student count divided by State funding, 1994-95. Source: Indiana DOE Division of Special Education.

These improvements in outcomes reduced educational costs and increased students' chances of future success. These results indicate the Indiana Early Literacy Intervention Program merits continued funding and further study.

CHAPTER VI

RECOMMENDATIONS

The Indiana Department of Education has provided an opportunity for schools to engage in systematic improvement of their early literacy programs through the Early Literacy Intervention Grant Program. This impact study confirms that this program has resulted in changes in early reading and literacy programs in funded schools that complement the balanced approach that is currently being used in Indiana schools. Further, based on the earlier study and other considerations and information sources, the IDOE made a number of refinements to the program in the past two years.

As a conclusion to this impact study, the Policy Center recommends further steps the IDOE can take to further refine early reading and literacy interventions through the ELIGP and other state and federal programs administered by the IDOE. We consider refinements in the ELIGP application and award processing strategies for enhancing early literacy intervention through ELIGP and other state administered programs, and strategies for using research and inquiry to further refine early reading programs in the state.

ELIGP Application and Award Processes

During the past year the IDOE took several steps to refine the application and award process for ELIGP. In 1997-98, all schools that applied for funds under ELIGP were at least partially funded. For 1998-99 and 1999-00, the support for training through Reading Recovery® continued to be generally available, which was appropriate given the focus on professional development. These developments are consistent with preview recommendations (see Chapter II). The report makes no specific recommendations about the Reading Recovery® application and award processes.

In contrast, the OELI segment of the program has had substantially more proposals than could be funded. As a result, the program made a number of refinements in the application and award processes. Therefore, there is a need to continue to refine the application and award processes for OELI.

The refinements in the application award processes made in the past two years used the conceptual framework (Chapter II) to achieve a closer alignment between program content and award decisions to OELI funding. Specifically the application asks schools to comment on their implemented philosophy and the relationship to the proposed intervention, as well as to indicate the features of their intervention (i.e. professional development, parent involvement, instructional processes, and organization of the reading program). In addition, the IDOE has used the Policy Center's reviews of the research-based programs (Appendix D) to inform schools about possible comprehensive and coherent intervention models. To further enhance the ongoing refinement of the application and award processes for OELI, three specific recommendations are made.

(1.1) Continue to identify research-based programs that should be considered by schools seeking funding.

The state of Indiana initiated the ELIGP two years before the federal government implemented the *Reading Excellence Act* and the Comprehensive School Restructuring Demonstration (CSRD) Project. Both of these major new federal reforms recommend research-based approaches to school improvement. The fact that the IDOE took the research-based approach to its new program is symbolic of the fact that the state has taken a leadership role.

This past year, the IDOE distributed descriptions of research-based programs to elementary schools (Appendix D). These descriptions allow schools to review and compare alternative research-based approaches. As part of this comparison, educators can discuss how various interventions might inform their efforts to improve and strengthen their own reading literacy programs. Thus, the opportunity to compare programs using common rubrics for comparison creates an opportunity to make more informed choice.

In addition a comparison of existing research-based programs provides an information resource that can inform the local designs of an intervention strategy. Specifically, schools can use the descriptions to

- *Review their school's implemented philosophy of reading and early literacy instruction.*
- *Reflect on possible change in their implemented philosophy and how they may want to change it in their effort to improve early reading and literacy.*
- *Identify the features of early literacy programs (i.e., parent involvement, instruction, and organization) that could be implemented to strengthen their school's early reading and literacy program.*
- *Identify the professional development opportunities that provide knowledge and skills needed to develop a comprehensive and coherent early literacy program.*

Thus, although the Indiana schools have exhibited a capacity to choose research-based OELI intervention, as evidenced by this impact study for 1997-98, there are good reasons to compare alternative research-based approaches. Therefore, it is important that the IDOE continue to review the research and disseminate information on emerging approaches to reading and literacy improvement.

(1.2) Expand the facilitation capacities of universities in Indiana to support early reading and literacy improvement projects.

The IDOE has invested substantially in an infrastructure for Reading Recovery®. Indeed, Reading Recovery® has become Indiana's preferred early literacy intervention method. The research indicates that Reading Recovery® has a good design for pullout, but lacks confirmatory research support (Snow, et al., 1998). This study confirms the soundness of design and the growing capacity of the state to address the reading problems of large numbers of students using this systematic intervention method, although only modest changes in outcomes were found. Therefore, it seems reasonable to continue with Reading Recovery® as a pullout intervention, especially if a systematic research program is continued to assess whether state funding provides the margin of difference. However, it also seems appropriate to explore ways to expand the capacity in Indiana to facilitate other types of interventions.

In particular, this study has found the interventions funded through OELI realized their potential for enabling education to improve educational outcomes. Currently the state lacks a facilitating organization for any of the research-based reforms (e.g., Four Blocks, Success For All, Accelerated School). This means that when schools seek funding for proven research-based reforms, they may necessarily have to seek professional development opportunities out of state.

This void is problematic for schools, the State of Indiana, and the universities in the state. First for schools there are added costs associated with out of state professional development opportunities. This situation can create a distance between educators and teacher educators, if teachers are encouraged to look out of state for professional development that is directly linked to the intervention they choose.

Second, for the State of Indiana, the void means there are insufficient professional development opportunities for teachers. There are too few professional development opportunities that are closely aligned with the successful, research-based approaches. This means that either the professional development opportunities will be limited or the state can fund fewer opportunities. More importantly, lack of a university-based professional development program with a research-based emphasis in early literacy programs can constrain the overall opportunity for teacher education. New teachers may not be sufficiently exposed to research-based interventions as part of their teacher preparation.

Finally, for universities, the lack of support for capacity building means universities must find external funding sources to develop research-based programs. Many states have supported the development of research-based interventions. There are two ways this could be achieved: through (a) direct grants to universities to subsidize some of the costs of capacity building (a recommendation we made last year); and/or (b) subsidies to teachers and schools to support training. Both of these approaches have been used for Reading Recovery®. The state should explore the prospect of funding professional development programs that support OELI projects.

(1.3) The IDOE should continue to align selection and award processes for OELI.

Part of the success of the first year of the OELI project can probably be attributed to the fact that schools that were "ready" applied for funding when the funds were available. Indeed the findings from this impact study indicate that some of the differences were evident in the year before funding, which indicates they were prepared to apply. Fortunately, these effects were sustained during the first year of funding.

By the 1999-2000 program-year, the IDOE had developed an application and award process that encouraged educators to think in systematic and comprehensive ways about their early reading and literacy programs. This systematic approach should be continued as it encouraged systematic approaches to reform with a high probability of success.

Building on Success

The ELIGP appears to be headed toward success. Our recommendations above, which echo a few unaddressed concerns raised in our earlier report (St. John, et al., 1998, see also Chapter II), represent further refinements to a program that appears to be a success.

The ELIGP has encouraged Indiana's elementary schools to engage in a systematic process of assessing early reading programs and designing intervention approaches that build on the strengths of the balanced approach to early reading and literacy education that is widely used in Indiana. Therefore, it makes good sense to encourage and extend this systematic approach. Specifically, we recommend the approach used in ELIGP be expanded and inform the state's other efforts to improve early reading, including schools undertaking intervention aimed at improving low reading scores, as well as remediation schools considering CSRD model approaches. The following recommendations encourage the migration of lessons learned from ELIGP to other reform efforts in the state.

(2.1) The IDOE should encourage schools to review their early reading and literacy programs to develop intervention approaches that build a refined balanced approach.

The current wave of federally encouraged research-based school reform could result in a predefined list of approved programs with little local discretion and flexibility. Indeed, to the extent that reforms become overly prescriptive, they can also foster resistance among teachers. The best alternative is to encourage the active involvement of teachers in reviewing alternative approaches to educational improvement and in selecting improvement strategies that strengthen their educational programs through openly chosen professional development opportunities. Some of the early success of ELIGP may be attributable to the fact that the program supported schools that had shown this type of self-initiative.

During the past two years the IDOE has encouraged schools to think critically about their early reading and literacy programs and to select intervention strategies that encourage systematic improvement through professional development. Recently, the Indiana Education Policy Center has developed a planning guide to enable schools to amend their early literacy curriculum to select alternatives that fit the direction of the school. This guide should be distributed to all of Indiana's elementary schools.

(2.2) Integrate an emphasis on early reading and literacy improvement into other ongoing reforms.

ELIGP represents only a modest portion of the funds dedicated to school improvement and professional development in Indiana. Certainly some of the other reform efforts are loosely coordinated with the early literacy program. For example, Title I schools often have an opportunity to support Reading Recovery®. However, given the national emphasis on schoolwide reform in Title I, CSRD and other intervention programs, it makes sense to move to a more direct integration of early reading and literacy improvement into the award and monitoring processes for these other state administered programs.

Consider the following example of how this integration can be achieved. The CSRD legislation and regulations identify a set of research-based programs. However, only one of the recommended programs (i.e., Success For All) has a strong confirmatory research base. Others are clearly designed based on research, but lack the confirmatory research base. If the goal is to insure an emphasis on early reading, one option might be to encourage schools to select Success For All. However, the alternative program included in CSRD, such as Levin's Accelerated School Project or Comer's School Development Process, have well-conceived designs, even if they lack a comprehensive approach to early literacy. Rather than force schools considering CSR toward one approach, we think it is more reasonable to encourage schools to assess their early literacy programs and make appropriate adaptations to the restructuring methods they choose. For example, Accelerated Schools Project (ASP), an alternative among CSRD's list of reforms, also encourages teachers to take stock of their current educational programs and use an inquiry-based intervention. If the schools selecting ASP were provided with the Policy Center's *Improving Early Reading and Literacy: A Guide for Developing Research-Based Programs* and other resources available through ELIGP, then they could attempt their own integrated approach to a developed, balanced approach to early reading and literacy.

The IDOE should review the policies and procedures they use to administer educational improvement programs and identify methods for encouraging schools to integrate a comprehensive approach to early reading and literacy improvement into their reform strategies.

The ELIGP program provides a systematic approach to reading improvement, using a research-based approach, and incorporates a systematic approach for evaluation. It might provide a framework for a proposal for state support through the *Reading Excellence Act*.

(2.3) *The state should increase the emphasis on ongoing professional development for elementary teachers focusing on early reading and literacy improvement.*

This study also supports arguments that ongoing professional development, especially professional development that supports class-wide instructional improvement, can positively influence educational outcomes. Indeed, there was a greater difference between Funded Schools and Comparison Schools in their professional development features than in instructional features. This supports IDOE efforts to integrate professional development and systematic school reform. Ideally the state's universities should play a greater role in facilitating professional development linked to systematic reforms in reading and school restructuring.

Evaluation and Information

This study also illustrates formative and summative evaluation research can inform program development. Indeed, last year's implementation report (a formative evaluation) helped inform the program development. This study (a summative evaluation) provides further information on the impact of the program that can further inform the ELIGP program developed in Indiana. We have two recommendations regarding the evaluation process:

(3.1) *The IDOE should continue to conduct an annual survey of ELIGP program impact.*

This impact study illustrates that it is possible to document changes in early reading literacy programs attributable to ELIGP funding, as well as to establish linkages between these changes in program features and changes in educational outcomes. However, further study is needed to assess the impact that recent changes in ELIGP have had on elementary schools and their students. In particular a follow-up study is needed to more fully assess the effects of the Reading Recovery® program in Indiana.

(3.2) *Given the lack of confirmatory research on many reading interventions funded under ELIGP, the state should routinely encourage more site-based research. Both site evaluations for large projects and systematic studies of funded projects are needed.*

While this study has shown it is possible to evaluate the impact of funding interventions using school surveys, it does not provide the type of research evidence typically used in educational research. Some of the OELI projects funded by ELIGP appear to have sound designs. They also lack a research base (e.g., Literacy Collaborative and Four Blocks). More systematic analysis of these interventions is needed.

(3.3) *Future analyses of the impact of ELIGP should consider the impact of funding on improvement in ISTEP+ scores, controlling for the student background, school characteristics and other factors.*

As the ELIGP program progresses and there is more opportunity for students receiving services to have completed the Grade 3 ISTEP+ reading tests, it will be important to assess the effects of funding on improvement in reading scores. In the present study it was not possible to assess the effects of funding on improvement in test scores because the students served by the Reading Recovery® teachers in training had not reached Grade 3. It would require one additional year (until fall of 1999) to assess the effects of funding on reading achievement by students who received services in 1997-98 from teachers trained the same year. However, it might even be necessary to wait until the test results from the fall of 2000 results were available, since that would be the first time a cohort instructed by teachers trained through ELIGP would have been tested to more fully assess the effects of these training subsidies.

Further, when analyses of conducted of the impact of funding on reading achievement, it is important that the analyses use an appropriate design. First, analyses should consider reading achievement by the lowest 20 percent of students, the population Reading Recovery® is intended to serve, as well as school-wide averages. In addition, it necessary to build statistical models that have appropriate controls for historical scores, poverty, and the type of schools district. These controls are especially important for Reading Recovery® since this program has been implemented in schools with high poverty rates.

However, it is possible to assess the effects of OELI projects on students who received services an who took ISTEP tests in fall of 1998, 1999, and 2000. Therefore, initial efforts should focus on building models for assessing the effects of OELI funding. Then these methods could also be used for Reading Recovery® when an appropriate cohort becomes available.

Conclusion

The Early Literacy Intervention Grant Program implemented in 1997-98 has proven to be a viable approach to improving early literacy in Indiana's elementary schools. In particular, the school-wide interventions have proven effective. In this chapter we have recommended additional steps the IDOE can take to further strengthen and improve early reading in Indiana. These include:

(1.1) *Continue to identify research-based programs that should be considered by schools seeking funding.*

(1.2) *Expand the facilitation capacities of universities in Indiana to support early reading and literacy improvement projects.*

(1.3) *Continue to align selection and award processes for OELI.*

(2.1) *Encourage schools to review their early reading and literacy programs to develop intervention approaches that build a refined balanced approach.*

(2.2) *Integrate an emphasis on early reading and literacy improvement into other ongoing reforms.*

(2.3) *The state should increase the emphasis on ongoing professional development for elementary teachers focusing on early reading and literacy improvement.*

(3.1) *The IDOE should continue to fund an annual survey of ELIGP program impact.*

(3.2) *Given the lack of confirmatory research on many reading interventions funded under ELIGP, the state should routinely encourage more site based research. Both site evaluations for large projects and systematic studies of funded projects are needed.*

(3.3) *Future analyses of the impact of ELIGP should consider the impact of funding on improvement in ISTEP+ scores, controlling for the student background, school characteristics, and other factors.*

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APPENDIX A

SURVEY INSTRUMENT

Study of Indiana's Early Literacy Programs

The position of the person(s) completing this survey is (are):

Principal ○ Assistant Principal ○ Teacher ○

Reading Specialist ○ Other (please state) ○ ____________________

PART I.

A. Background on Early Primary Reading Programs, 1995-96 through 1998-99

Please Indicate by checking if your school had any of these programs in the following years:

Title of Intervention	95-96	96-97	97-98	98-99
Reading Recovery	○	○	○	○
Success for All	○	○	○	○
Early Literacy Learning Initiative (ELLI)	○	○	○	○
Full Day Kindergarten	○	○	○	○
Directed Tutoring	○	○	○	○
First Steps	○	○	○	○
Title I (Reading)	○	○	○	○
Even Start	○	○	○	○
Accelerated Schools	○	○	○	○
Four-Block Method	○	○	○	○
Other Early Literacy Program (please list) ______________________________	○	○	○	○

2. Do you have a school policy regarding the minimum amount of time spent on reading instruction per day?

Yes ○ No ○

If yes, describe your school's policy.

3. What is the average amount of time per day spent on reading instruction in your school for the following grade levels?

Grade Level	Time per day (Minutes)
Kindergarten	☐
1st grade	☐
2nd grade	☐
3rd grade	☐

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PART II.

Instructions: Please indicate ☑ the extent to which the following features were used as part of the early literacy program in your school during the following years.

A. Structural/Organizational Features

Program Feature	1996-1997 Extent of use					1997-1998 Extent of Use					Description of Feature
	Never	Rarely	Occasionally	Often	Every day	Never	Rarely	Occasionally	Often	Every day	
1. Ability Grouping											Students assigned to groups based on ability.
Kindergarten	○	○	○	○	○	○	○	○	○	○	
1st Grade	○	○	○	○	○	○	○	○	○	○	
2nd Grade	○	○	○	○	○	○	○	○	○	○	
3rd Grade	○	○	○	○	○	○	○	○	○	○	
2. Basal Readers											Series of graded readers.
Kindergarten	○	○	○	○	○	○	○	○	○	○	
1st Grade	○	○	○	○	○	○	○	○	○	○	
2nd Grade	○	○	○	○	○	○	○	○	○	○	
3rd Grade	○	○	○	○	○	○	○	○	○	○	
3. Child-initiated Learning Centers											Materials kept in central area, allowing children to choose materials that interest them.
Kindergarten	○	○	○	○	○	○	○	○	○	○	
1st Grade	○	○	○	○	○	○	○	○	○	○	
2nd Grade	○	○	○	○	○	○	○	○	○	○	
3rd Grade	○	○	○	○	○	○	○	○	○	○	
4. Independent Reading											Students read silently from materials they choose.
Kindergarten	○	○	○	○	○	○	○	○	○	○	
1st Grade	○	○	○	○	○	○	○	○	○	○	
2nd Grade	○	○	○	○	○	○	○	○	○	○	
3rd Grade	○	○	○	○	○	○	○	○	○	○	
5. One-on-one Tutorial											Staff provides one-to-one instruction to student.
Kindergarten	○	○	○	○	○	○	○	○	○	○	
1st Grade	○	○	○	○	○	○	○	○	○	○	
2nd Grade	○	○	○	○	○	○	○	○	○	○	
3rd Grade	○	○	○	○	○	○	○	○	○	○	

A. Structural/Organizational Features (continued)

Program Feature	1996-1997 Extent of use					1997-1998 Extent of Use					Description of Feature
	Never	Rarely	Occasionally	Often	Every day	Never	Rarely	Occasionally	Often	Every day	
6. "Pullout" Instruction											Students leave their regular classroom for specialized instruction in another room.
Kindergarten	○	○	○	○	○	○	○	○	○	○	
1st Grade	○	○	○	○	○	○	○	○	○	○	
2nd Grade	○	○	○	○	○	○	○	○	○	○	
3rd Grade	○	○	○	○	○	○	○	○	○	○	
7. Small Groups											Students work together in small groups led by teacher, paraprofessional, or student.
Kindergarten	○	○	○	○	○	○	○	○	○	○	
1st Grade	○	○	○	○	○	○	○	○	○	○	
2nd Grade	○	○	○	○	○	○	○	○	○	○	
3rd Grade	○	○	○	○	○	○	○	○	○	○	
8. Systematic, Formative Evaluation											Students are tested frequently to monitor literacy gains.
Kindergarten	○	○	○	○	○	○	○	○	○	○	
1st Grade	○	○	○	○	○	○	○	○	○	○	
2nd Grade	○	○	○	○	○	○	○	○	○	○	
3rd Grade	○	○	○	○	○	○	○	○	○	○	
9. Trade Books											Uses literature-based books as the basis for reading instruction.
Kindergarten	○	○	○	○	○	○	○	○	○	○	
1st Grade	○	○	○	○	○	○	○	○	○	○	
2nd Grade	○	○	○	○	○	○	○	○	○	○	
3rd Grade	○	○	○	○	○	○	○	○	○	○	

B. Classroom Instruction

Program Feature	1996-1997 Extent of use					1997-1998 Extent of Use					Description of Feature
	Never	Rarely	Occasionally	Often	Every day	Never	Rarely	Occasionally	Often	Every day	
1. Big Books											Oversized books students read together in class.
Kindergarten	○	○	○	○	○	○	○	○	○	○	
1st Grade	○	○	○	○	○	○	○	○	○	○	
2nd Grade	○	○	○	○	○	○	○	○	○	○	
3rd Grade	○	○	○	○	○	○	○	○	○	○	
2. Cooperative Learning											Students work in groups toward common and/or individual goals.
Kindergarten	○	○	○	○	○	○	○	○	○	○	
1st Grade	○	○	○	○	○	○	○	○	○	○	
2nd Grade	○	○	○	○	○	○	○	○	○	○	
3rd Grade	○	○	○	○	○	○	○	○	○	○	
3. Creative Writing and/or essays											Students write stories on their own or with some guidance.
Kindergarten	○	○	○	○	○	○	○	○	○	○	
1st Grade	○	○	○	○	○	○	○	○	○	○	
2nd Grade	○	○	○	○	○	○	○	○	○	○	
3rd Grade	○	○	○	○	○	○	○	○	○	○	
4. Drama											Students stage a written selection, interacting with the text in the process.
Kindergarten	○	○	○	○	○	○	○	○	○	○	
1st Grade	○	○	○	○	○	○	○	○	○	○	
2nd Grade	○	○	○	○	○	○	○	○	○	○	
3rd Grade	○	○	○	○	○	○	○	○	○	○	
5. Emergent Spelling											Students encouraged to write before mastering spelling rules.
Kindergarten	○	○	○	○	○	○	○	○	○	○	
1st Grade	○	○	○	○	○	○	○	○	○	○	
2nd Grade	○	○	○	○	○	○	○	○	○	○	
3rd Grade	○	○	○	○	○	○	○	○	○	○	

B. Classroom Instruction (continued)

Program Feature	1996-1997 Extent of use					1997-1998 Extent of Use					Description of Feature
	Never	Rarely	Occasionally	Often	Every day	Never	Rarely	Occasionally	Often	Every day	
6. Paired Reading											Pairs read to each other and are encouraged to help each other.
Kindergarten	○	○	○	○	○	○	○	○	○	○	
1st Grade	○	○	○	○	○	○	○	○	○	○	
2nd Grade	○	○	○	○	○	○	○	○	○	○	
3rd Grade	○	○	○	○	○	○	○	○	○	○	
7. Phonics											Direct, explicit instruction in sound-letter correspondences.
Kindergarten	○	○	○	○	○	○	○	○	○	○	
1st Grade	○	○	○	○	○	○	○	○	○	○	
2nd Grade	○	○	○	○	○	○	○	○	○	○	
3rd Grade	○	○	○	○	○	○	○	○	○	○	
8. Reading Aloud											Teachers read stories and other texts aloud to their students.
Kindergarten	○	○	○	○	○	○	○	○	○	○	
1st Grade	○	○	○	○	○	○	○	○	○	○	
2nd Grade	○	○	○	○	○	○	○	○	○	○	
3rd Grade	○	○	○	○	○	○	○	○	○	○	
9. Reading Drills											Directly instructing students on reading sub-skills, using directly-targeted, repetitive, and analytic exercises.
Kindergarten	○	○	○	○	○	○	○	○	○	○	
1st Grade	○	○	○	○	○	○	○	○	○	○	
2nd Grade	○	○	○	○	○	○	○	○	○	○	
3rd Grade	○	○	○	○	○	○	○	○	○	○	
10. Worksheets/ Workbooks											Students fill out worksheets as part of the reading program.
Kindergarten	○	○	○	○	○	○	○	○	○	○	
1st Grade	○	○	○	○	○	○	○	○	○	○	
2nd Grade	○	○	○	○	○	○	○	○	○	○	
3rd Grade	○	○	○	○	○	○	○	○	○	○	

C. Professional Development

Instructions: Please indicate ☑ which of the following features were used as part of the early literacy program in your school during the following years.

Program Feature	1996-1997				1997-1998				Description of Feature
	Kindergarten	1st Grade	2nd Grade	3rd Grade	Kindergarten	1st Grade	2nd Grade	3rd Grade	
1. Certified Training	○	○	○	○	○	○	○	○	Instructors in reading program are *required* to have reading specialist certification or other official affiliation.
2. Certified Specialist	○	○	○	○	○	○	○	○	A certified specialist comes to the school to assist with training of teachers and other participants.
3. In-service Workshops	○	○	○	○	○	○	○	○	Teacher-attended workshop at the school provided by a topical expert.
4. Networking	○	○	○	○	○	○	○	○	Teachers meet with teachers from other schools who are involved in similar literacy approaches.
5. Opportunity for Collaboration	○	○	○	○	○	○	○	○	Teachers have release time for meetings, peer observations, etc.

D. Parent Involvement

Program Feature	1996-1997				1997-1998				Description of Feature
	Kindergarten	1st Grade	2nd Grade	3rd Grade	Kindergarten	1st Grade	2nd Grade	3rd Grade	
1. Book Distribution	○	○	○	○	○	○	○	○	Distributes books to households that may have limited reading materials.
2. Family Literacy	○	○	○	○	○	○	○	○	Literacy instruction provided to parents.
3. Paired Reading	○	○	○	○	○	○	○	○	Parents help children with reading.
4. Parent Conferences	○	○	○	○	○	○	○	○	Teachers meet with parents to discuss student progress.
5. Parent Volunteers	○	○	○	○	○	○	○	○	Parents volunteer their time to help directly in instruction.

Part III. Implemented Philosophy

Please indicate on the following scale (See Example) the beliefs that best reflect your school's philosophy towards early literacy instruction for each year, K–3.

Example: The following would indicate a slightly higher emphasis on teacher directed instruction, compared to student directed instruction.

Teacher Directed	←☐☑☐☐☐→	**Student Directed**

Teacher Directed	←——→		**Student Directed**
Teacher actively engaged in direct instruction with students, providing information, selecting topics and materials, as well as setting the pace of instruction, student response and practice.	K	←☐☐☐☐☐→	Students encouraged to take charge of their own education, to choose from a variety of literacy activities and/or materials, work independently or with peers to create their own interpretations and discover general rules.
	1st	←☐☐☐☐☐→	
	2nd	←☐☐☐☐☐→	
	3rd	←☐☐☐☐☐→	

Child Centered/ Developmental	←——→		**Prescribed/systematic**
Curriculum content and pace are determined by the individual child's developmental level and needs, including the child's concepts of grammar and linguistics.	K	←☐☐☐☐☐→	Curriculum content and pace is pre-determined and based on child's age and/or grade level.
	1st	←☐☐☐☐☐→	
	2nd	←☐☐☐☐☐→	
	3rd	←☐☐☐☐☐→	

Code/Phoneme emphasized	←——→		**Meaning/Comprehension emphasized**
Reading instruction focuses primarily on decoding individual word sounds (phonemes) and learning phonological rules.	K	←☐☐☐☐☐→	Reading instruction focuses primarily on gaining meaning from text rather than on decoding individual sounds (phonemes) and learning phonological rules.
	1st	←☐☐☐☐☐→	
	2nd	←☐☐☐☐☐→	
	3rd	←☐☐☐☐☐→	

Code/Phonemes most effectively taught *outside of* context	←→	**Code/Phonemes most effectively taught *within* context**
Decoding of individual word sounds (phonemes) and phonological rules are best learned when words are isolated from text (such as sentences or paragraphs).	K ←☐☐☐☐☐→	Decoding of individual word sounds (phonemes) and phonological rules are best learned when words are presented within meaningful text (such as sentences or paragraphs).
	1st ←☐☐☐☐☐→	
	2nd ←☐☐☐☐☐→	
	3rd ←☐☐☐☐☐→	

PART IV. School Information

Instructions: Please provide the following information about your school for the following years.

1. Please indicate the enrollment on the following dates in this school for each of the grade levels. [Each date indicated is a day on which numbers were collected for average daily membership. However, some schools' actual enrollment may differ from the count of average daily membership.]

	September 15, 1995	September 13, 1996	September 12, 1997
Kindergarten	☐	☐	☐
1st Grade	☐	☐	☐
2nd Grade	☐	☐	☐
3rd Grade	☐	☐	☐

2. Please indicate the number of classrooms in the school for each of the grade levels in the school years listed below.

	1995-96	1996-97	1997-98
Kindergarten	☐	☐	☐
1st Grade	☐	☐	☐
2nd Grade	☐	☐	☐
3rd Grade	☐	☐	☐

3. List the number of each of the following:

Total number of referrals for special education assessment:					Total number of grade retentions :					Total number of Kindergarten students referred for developmental or transitional 1st Grade or transitional kindergarten:	
	K	1st	2nd	3rd		K	1st	2nd	3rd		
1995-96					1995-96					1995-96	
1996-97					1996-97					1996-97	
1997-98					1997-98					1997-98	

4. If your school had Reading Recovery in any of these schools years, please indicate the number of students receiving Reading Recovery lessons, the number completing the program, and the number still enrolled in the school.

		95-96	96-97	97-98
a.	Had Reading Recovery			
b.	Number of students who received at least one lesson			
c.	Number of students completing Reading Recovery lessons			
d.	Number of completers still enrolled in the school			
e.	Number of completers who were retained in first grade			
f.	Number of completers who were referred for special education assessment			

Thank you again for taking the time to complete our questionnaire!

APPENDIX B

FEATURES OF EARLY LITERACY INTERVENTIONS

Appendix B

A List and Description of Program Features By Category

In addition to organizing the features into the five categories, we describe each feature using a four-point analysis.

- In the *definition* section, the feature is described in sufficient detail to define it, without considering effects, implications, or costs.
- The *description* section allows additional material relating to the feature to be presented: this material may include examples, implications, historical background, a short list of features it is often associated with, and any other information helpful in understanding its likely costs and intended effects.
- The *costs* section spells out what kinds of costs are likely to be associated with the feature, how flexible those costs are depending on implementation, etc.
- The *outcomes* section states which outcomes this feature is most commonly associated with.
- Finally, the *example(s)* section indicates in which program(s) the feature is most prominent. Descriptions of programs, from which program features may be derived can be encountered in the following books: Tierney et al., 1995; NWREL, 1998; Talley & Martinez, 1998.[1]

The advantage to analyzing programs on the level of features is that this method provides a specific and comparatively precise way of linking interventions to outcomes. It enables a logical prediction of the likely effects of an intervention, which can then be verified by consulting empirical research. Ultimately, this analysis could help planners choose, design, and adapt interventions to fit their schools' needs.

Professional Development Features

Professional development is gaining increased recognition as a vital aspect of schools and interventions. In short, the effect of professional development is the increased likelihood that teachers at a site consistently integrate the school's existing philosophy in general, and an intervention's theoretical base in particular, with actual classroom activities. It is thus tightly linked with the theoretical base, and often times the two inform each other, especially in situations where schools develop their own programs.

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[1] References cited in the appendices are listed in the Reference List, beginning on page 109.

Without a site-based, ongoing professional development component, the successful implementation of an agreed-upon theoretical or philosophical approach is threatened. This is true of any group of professionals with a common set of goals, but it is especially important in schools where once teachers are behind the closed doors of the classroom, they teach according to their best judgment. Professional development will enhance the "buy into" effect, making teachers believe more in what the school as a whole is doing, especially when they perceive themselves participating in their school's values. Professional development also gives teachers venues of addressing concerns, asking questions, and talking about successes and problems. Without it, teachers, classrooms, and ultimately students may not get the support and structure that they need.

Because professional development is a part of the foundation of a program, it affects outcomes only indirectly. Professional development defines and maintains the theoretical base, which in turn affects and even generates specific primary features, that is, classroom instruction, organizational/structural, and parent component features. Thus, while it is crucial to outcomes, it does not directly affect them. For example, a "certified specialist" feature is not in itself likely to affect Decoding A. In a Success For All school, however, a certified specialist feature will help teachers carry out the theoretical base through classroom instructional features, and the teacher practicing those features will directly affect Decoding A. A certified specialist in a full day kindergarten program, however, will ultimately affect Emergent Literacy, and a Reading Recovery specialist will likewise ultimately affect Decoding B. The certified specialist component, then, helps teachers affect the outcomes they are targeting.

Certified or university training

- *Definition*: Intervention requires some sort of official affiliation, effected either through university attendance or another certification process.
- *Description*: Creating this threshold to entry has the dual effect of allowing only committed school systems to participate and ensuring a certain degree of consistent background among implementing schools—namely, the certification process. Both of these effects should make implementation across schools more consistent and improve the long-term solvency of the program.
- *Costs*: Very high.
- *Outcomes*: Indirect.
- *Example(s):* Reading Recovery (Clay, 1991); ELLI (OSU, 1998); Success for All (Slavin et al., 1990).

Certified specialist

- *Definition*: As a part of the intervention, a certified specialist comes to the school to help implementation by training teachers and other participants.
- *Description*: The certified specialist often performs the role of a consultant, ensuring that program implementation is in accordance with the official program design.
- *Costs*: Depending on the degree of involvement and duration of the commitment, this feature can be moderately to very expensive.
- *Outcomes*: Indirect.
- *Example(s):* Reading Recovery (Clay, 1991); ELLI (OSU, 1998); Success For All (Slavin et al., 1990); Four-Block Method (Cunningham, 1991).

In-service workshop

- *Definition*: An expert in a particular topic gives a workshop for the teaching staff.
- *Description*: A long-time staple of professional development in schools, this feature has come under fire for not being followed up and thus not having any sustained or meaningful impact. Placed in a more comprehensive program of professional development, however, such workshops could be of benefit.

- *Costs*: Inexpensive, since they are one-time-only events, requiring funds to pay the presenter and teacher salaries for one session.
- *Outcomes*: Indirect.
- *Example(s):* Success for All (Slavin et al., 1990).

Networking

- *Definition*: Teachers meet with teachers from other sites participating in the same intervention.
- *Description*: Networking enables schools to maintain a dialogue with each other about the intervention—its effects, problems, etc. This feature provides greater consistency of implementation across a region and increases the net of support available to teachers.
- *Costs*: With the increasing availability of e-mail, the circulation of specialists throughout a region, and the convenience of other methods of communication, such as traditional mail, phones, and faxes, networking has never been easier or cheaper. Its primary expense is the amount of time teachers spend actually doing it.
- Outcomes: Indirect.
- *Example(s):* Reading Recovery (Clay, 1991); ELLI (OSU, 1998).

Ongoing support

- *Definition*: Teachers have regular ongoing support from any number of sources about the intervention.
- *Description*: This may or may not include a certified specialist, but what it does involve is regular, ongoing professional development time devoted to the intervention—questions, peer observations, discussions, training on relevant topics, etc. An example is Reading Recovery's regular meetings with Reading Recovery teachers and trainers, which ensures consistent implementation of the various Reading Recovery features.
- *Costs*: High.
- *Outcomes*: Indirect.
- *Example(s):* Reading Recovery (Clay, 1991); ELLI (OSU, 1998); Success for All (Slavin et al., 1990).

Implemented Theoretical/Philosophical Features

The features in this category have an indirect relationship with outcomes, but they are vital in both determining which other features become a part of the program, and they maintain the program's integrity over time by establishing clear priorities and specific methods. Without a strong theoretical base, programs are more likely to come and go, having little long-term effect. The reason for this dissipation is that without a theoretical base, it is difficult for teachers all to use the same methods with the same emphases, classroom to classroom, year to year. Consistent long-term implementation of a program requires ongoing communication, which requires professional development, and some kind of intellectual structure, which the theoretical base provides.

Most existing interventions, such as Reading Recovery, Success For All, and the Four-Block Method have a strong theoretical base. Professional development time becomes a necessary factor in communicating that theoretical base to teachers and teaching them how to implement it (i.e., through other features, such as classroom instructional methods, etc.). For those schools that create their own interventions, a theoretical base is equally important.

As with features in the Classroom/Instructional category, Philosophical/Theoretical features have no costs associated with them directly. Having a Whole Language approach costs nothing until it is implemented through other features, and then it is those features—trade books, parent literacy training, etc.—that have costs.

Developmental:

- *Definition*: This theory approaches teaching literacy acquisition through the *child's* concepts of grammar and linguistics.
- *Description*: A child-centered model based initially on the work of Piaget, and more recently the work of Russian psychologist Vygotsky has become influential. Rather than teaching literacy according to a "correct" or "transmission" model, it exercises and guides children's metacognitive strategies, helping children develop adult literacy on their own through guided experimentation and trial and error. Teachers try to keep students within what Vygotsky termed the "Zone of Proximal Development," a place where the students are in familiar enough territory to function, but where enough is unfamiliar that they are stimulated to grow. Note: this approach differs from a Student Empowerment approach in that it is still teacher-led. The hallmark of this approach is the interactivity between teachers and students as they negotiate the direction of learning. On the whole, this approach is largely consistent with most other approaches and indeed is a staple of the American education system.
- *Costs*: NA.
- *Outcomes*: Emergent Literacy, Decoding B, Comprehension, Critical Literacy.
- *Example(s):* Reading Recovery (Clay, 1991); Success for All (Slavin et al., 1990); ELLI (OSU, 1998); Full Day Kindergarten (Humphrey, 1988).

Learning community:

- *Definition*: An institution-wide effort to make all individual learning occur within a community environment, where individuals perceive themselves as members of a group, and in which other individuals are seen as peers and potential supporters.
- *Description*: This theory attempts to partially dismantle the gap between educators and students, with teachers participating in the learning and students participating in the direction of the learning. Advocates also insist on the collaboration of parents, principles, and administrators, a collaboration which is designed to ensure the common sense of purpose and growth. A functioning learning community enhances the chances of a consistent and coherent school philosophy.
- *Costs*: NA.
- *Outcomes*: Emergent Literacy, Decoding B, Comprehension, Critical Literacy.
- *Example(s):* ELLI (OSU, 1998).

Phonological awareness:

- *Definition*: A systematic approach to teaching directly the relationships between oral and written language.
- *Description*: Phonics is the most famous component of this approach, and the two are often treated synonymously in popular parlance. But Phonological Awareness is a broader category than Phonics, which properly is the relationship between letters and sounds. Phonological Awareness encompasses all aspects of the relationships between sounds and written language. For example, the knowledge that "The cat is running" has four words (many young children will say there are two: "thecat" and "isrunning") is a kind of phonological awareness. More generally, children must be able to distinguish between sentences, words, syllables, and phonemes (individual sounds) before they can even use Phonics or for that matter decode. Because phonological rules are established—that is, some utterances are correct and others are not—and because phonology is so complex, advocates of this approach argue that phonology should be taught systematically and directly, rather than indirectly. Its rules should be taught, not discovered. As one of the two great contenders in the reading wars of the past several decades (Whole Language is the other), Phonological Awareness has gained momentum especially in the early stages of reading instruction. (See also Whole Language.)
- *Costs*: NA.
- *Outcomes*: Emergent Literacy, Decoding A.
- *Example(s):* Reading Recovery (Clay, 1991); Success for All (Slavin et al., 1990); Four-Block Method (Cunningham, 1991); Full Day Kindergarten (Humphrey, 1988).

Self-extending system:

- *Definition*: The program attempts to instill in children the rudiments of a system of learning that each student will take over.
- *Description*: The ultimate goal of M. M. Clay's method and one of the key theories driving Reading Recovery, this system will empower the student to continue expanding metacognitive

strategies and horizons, enabling Vygotskian development to take place guided increasingly by the student's desire and ability, rather than by instructor direction. The approach is consonant with both a Whole Language and Developmental philosophies, but it more directly addresses the need for a bridge between Decoding A and Critical Literacy. That bridge is Decoding B, specifically designed for this purpose: to build a network of strategies of increasing sophistication aimed at meaning getting. It combines the instructional paradigm of word attack with the meaning orientation of Whole Language, resulting in what might be called, "meaning attack." With this in place, the implementation of a student empowerment approach should become less risky.

- *Costs*: NA.
- *Outcomes*: Decoding B.
- *Example(s):* Reading Recovery (Clay, 1991).

Student empowerment:

- *Definition*: Students are encouraged to take charge of their own education.
- *Description*: Students can take charge of their education through features/activities such as selecting their own reading materials, devising their own written assignments, creating their own interpretations, etc. The intended benefits of this feature are as follows: (a) students begin to love learning, because it is important to them; (b) students learn how to learn, because they are given opportunities to do so and because they have the motivation to do so. In short, education becomes much more meaningful, and students push themselves to levels of achievement not likely in a less student-centered approach. By fostering responsibility early on, students are also prepared for life, where they will be responsible for their conduct and performance in jobs, marriage, etc. The possible downside of this approach is the chance that students will pursue only topics of immediate interest at the expense of less interesting but equally important topics, that they will choose activities that are below or above their skill level, that they will not teach themselves how to learn well, and/or that the benefits of this method are hard to measure, since students in part develop their own curriculum. Note that this approach is highly dependent on level of implementation, which requires significant teacher training, planning, record-keeping, etc.
- *Costs*: NA
- *Outcomes*: Decoding B, Comprehension, Critical Literacy.
- *Example(s):* Reading Recovery (Clay, 1991); Four-Block Method (Cunningham, 1991); ELLI (OSU, 1998).

Thematic units:

- *Definition*: A deeply meaning-oriented approach, this approach teaches literacy (and a great number of other intellectual disciplines) within the context of a theme, e.g., Ancient Egypt.
- *Description*: This feature illustrates that some theoretical/philosophical approaches are less fundamental and more instruction-oriented than others. Where a Developmental approach touches on nearly everything in a student's early career, Thematic Units is more concentrated. Nevertheless, it is a theory because it generates features in several other categories. It usually leads to a multidisciplinary, multimedia, content-driven curriculum. It is commonly associated with Whole Language, though it could work well also with several other approaches.
- *Costs*: NA.
- *Outcomes*: Comprehension, Critical Literacy.
- *Example(s):* ELLI (OSU, 1998); Success for All (Slavin et al. 1990).

Whole Language:

- *Definition*: Whole Language emphasizes that all communication, including written, must be meaningful, and any approach to teaching literacy must be meaning-oriented.
- *Description*: Whole Language is one of the two great contenders (the other is Phonics, now Phonological Awareness) in the decades-old reading wars. As a philosophy, it rejects "unnatural" and "boring" approaches to teaching reading, such as Phonics and basal readers, in favor of holistic approaches. These specific approaches usually include Phonics, but it is usually taught in a more meaning-oriented and less systematic context. At the same time, it emphasizes that literacy is acquired through a complex psycholinguistic process, which is often best helped along through indirect and environmental means rather than through more direct methods of instruction. (See also Phonological Awareness.)
- *Costs*: NA.
- *Outcomes*: Emergent Literacy, Decoding B, Comprehension, Critical Literacy.

- *Example(s):* Reading Recovery (Clay, 1991); ELLI (OSU, 1998); Success for All (Slavin et al., 1990); Four-Block Method (Cunningham, 1991).

Organizational/Structural Features

Features in this category have to do with the way the intervention is physically and materially organized. Features that limit the age or ability of participants, the placement of chairs in the room, and the types of books used are all in this category. They directly influence outcomes as well as classroom instruction features.

The features in this category are a key source of costs in interventions, because the structure or organization of a program determines teacher time, paraprofessional time, materials purchasing, physical remodeling, etc.

Ability grouping:
- *Definition*: Groups of students are selected on the basis of shared ability, rather than age or other factors.
- *Description*: Ranges from a far-reaching radical restructuring of a school, as in Success For All, where students switch between traditional age classes and ability-based classes, and simply identifying a problem that a number of students have and temporarily pulling them together long enough to address the problem.
- *Costs*: depending on the size of the groups, this feature could have a variable impact on teacher time. Small groups might require extra teachers or paraprofessionals.
- *Outcomes*: Decoding A, Comprehension
- *Example(s):* Success for All (Slavin et al., 1990).

Basic reading ability assumed:
- *Definition*: Program takes for granted a basic ability to read simple texts and is designed to improve and deepen that ability. It also assumes Emergent Literacy or Reading Readiness.
- *Description*: This is a feature of targeted interventions, such as Reading Recovery, which are not comprehensive school reforms, but rather which seek to limit eligibility, entry, instructional methods, and outcomes to maximize a certain kind of impact.
- *Costs*: This feature is essentially an assumption, and as such, is free. Its existence may bring down the cost of a program, in fact, by limiting its operations, and thus expenses. For example, with this assumption, the intervention does not have to provide for emergent literacy materials, such as a literacy rich environment, early reading books, etc. Of course, those operations will have to be compensated for elsewhere.
- *Outcomes*: Decoding B, Comprehension.
- *Example(s):* Reading Recovery (Clay, 1991).

Basal readers:
- *Definition*: Program uses a series of graded readers, usually constructed with controlled vocabulary and syntax.
- *Description*: Basal readers have a key advantage and a key disadvantage. The advantage to basal readers is that they help control instruction by making it consistent, predictable, and comprehensive (e.g., they ensure children read from all genres and read from books of increasing difficulty). They have also been bitterly criticized by the Whole Language movement because they take choice away from children and allegedly drain the pleasure out of reading. The risk of going to a more choice oriented reading program is that children will read only from one genre (e.g., short fiction) or will read only easy books. Cunningham (1991), the originator of the Four-Block Method advocates mixing the two approaches, fostering a love of reading with comprehensiveness of reading instruction. Basal book publishers have also recently striven to make stories more natural and interesting to students, in spite of the controlled vocabulary.
- *Costs*: Purchasing the books from the publisher can be a significant expense. Mitigating this expense are the long-term use schools can get from the one-time expense, the fact that schools already budget for books, and the fact that teachers will likely require less preparation time, since

basal readers usually have a pre-scripted course. Combining basal readers with a more student-centered approach, however, can add significant costs as this combination will also require the purchase of trade books.

- *Outcomes*: Decoding A, Comprehension.
- *Example(s):* Four-Block Method (Cunningham, 1991); Success For All (Slavin et al., 1990).

Child-initiated learning centers:

- *Definition*: Curricular/topical materials are kept in a central area, allowing children to choose the materials that interest them most.
- *Description*: This is one of several features that relates to the dilemma between more choice, which enhances student empowerment and motivation, and more structure, which effects greater consistency and comprehensiveness of learning. Programs that try to balance these two might include basal readers or worksheets to address the dilemma. A more traditional Whole Language program might couple this feature with similar content-oriented, student-centered features, such as silent individual reading, essays, theme-based learning, interpreting/discussion, etc.
- *Costs*: This feature is more a way of organizing existing materials than it is purchasing new ones, and so may not be expensive. If it is a part of a restructuring of the classroom, the adaptation could require some expenses, such as physical remodeling, an upgrade of existing materials, etc.
- *Outcomes*: Comprehension, Critical Literacy.
- *Example(s):* ELLI (OSU, 1998).

Classroom-based:

- *Definition*: Program works with class as a whole, rather than with individuals in tutorial or small-group settings.
- *Description*: Most classes are already organized in this way. It is most compatible, then, with teacher centered instruction, and it will help to maintain consistency of instruction at the level of the class. Instruction will affect the class at a whole, rather than individually, as with one-on-one tutoring. It remains the most effective way to improve outcomes (such as test scores) for the whole class, although it may leave some students behind.
- *Costs*: Because most classes are already organized in this way, the feature need not cost anything in itself. As a part of a comprehensive effort at school restructuring, as in Success For All, additional costs may be accrued.
- *Outcomes*: Emergent Literacy, Decoding A, Comprehension.
- *Example(s):* Success For All (Slavin et al., 1990); Four-Block Method (Cunningham, 1991); ELLI (OSU, 1998).

Diagnostic procedures:

- *Definition*: Program uses at least a partially explicit set of criteria and/or methods to evaluate individual children's abilities and needs prior to or during participation in the program; this information is used primarily for placement.
- *Description*: Diagnostic procedures are used to determine eligibility for placement, and they may help schools identify places that children are slipping through cracks in addition to providing a relatively objective means of selection.
- *Costs*: Diagnostic procedures are often little more than administering a test during class time, and so may add little to no cost. Some methods of diagnostics are more involved, however, as in "Roaming around the known" in Reading Recovery, in which teachers and students spend a full week establishing rapport as the teachers collect information about the student's individual knowledge and needs.
- *Outcomes*: Emergent Literacy, Decoding A, Decoding B, Comprehension, Critical Literacy.
- *Example(s):* Reading Recovery (Clay, 1991); Success for All (Slavin et al., 1990); Four-Block Method (Cunningham, 1991).

Grade limit:

- *Definition*: Program excludes certain grades from participating, targeting a specific age group; e.g., Reading Recovery is only used in the first grade.
- *Description*: Grade limit is similar to basic reading ability assumed in that it defines the program by setting limits—in this case by age—that enable to the program to focus on a targeted outcome, approach, population, etc. Full-day kindergarten is a classic example.
- *Costs*: As with the basic reading ability assumed feature, the limiting itself does not add costs necessarily, though adapting existing circumstances to meet it may require some expenditures.

- *Outcomes*: Emergent Literacy, Decoding B.
- *Example(s):* Reading Recovery (Clay, 1991); Four-Block Method (Cunningham, 1991), Full Day Kindergarten (Humphrey, 1988).

Literacy rich environment:

- *Definition*: Program promotes literacy acquisition by promoting an environment that encourages literate activity.
- *Description*: Examples include wall decorations, such as signs, recipes, pictures with captions, etc.; a well-stocked library; and any environmental feature that reinforces print concepts and encourages reading.
- *Costs*: environmental changes can range from inexpensive to quite expensive, depending on the materials in the environment and the teacher time required to put them there. Pasting certain assignments on the walls upon completion can be quite inexpensive, while stocking a quality library in each room can be expensive. Since most schools use a combination of these alternatives, costs are probably moderate, with considerable flexibility built in.
- *Outcomes*: Emergent Literacy, Decoding A, Decoding B, Comprehension, Critical Literacy.
- *Example(s): ELLI* (OSU, 1998); Success for All (Slavin et al., 1990); Four-Block Method (Cunningham, 1991); Full Day Kindergarten (Humphrey, 1988).

One-on-one tutoring:

- *Definition*: Tutoring between a teacher or paraprofessional and one student.
- *Description*: One-on-one tutoring enables classroom instructional features such as paired reading, ongoing written observations, Vygotskian developmental approaches and is a staple of Reading Recovery as well as an additional method of intervention for students not achieving in classroom-based interventions, such as Success for All. It has been proven as a highly effective method of reaching struggling individuals, but its great expense confines it to a limited role, making classroom-wide improvements unlikely.
- *Costs*: Costs are high for this feature, because teachers can only see so many students in a day. Costs can be even higher, though: since individualized attention is the point of this feature, programs often seek to maximize this benefit by individualized record-taking, diagnostic procedures, etc. Thus hand-in-hand with this feature is often an increased amount of teacher time during which teachers are not teaching *any* students.
- *Outcomes*: Emergent Literacy, Decoding B, Comprehension, Critical Literacy.
- *Example(s):* Reading Recovery (Clay, 1991); Full Day Kindergarten (Humphrey, 1988).

Ongoing written observations:

- *Definition*: Teachers keep records of and track progress on students' activities, books read, etc., on an individual basis.
- *Description*: The records describe what goes on in tutorials, and often include information about how kids are progressing as determined by simple tests, e.g., how many familiar words can the student read from a list in a minute. These records focus on specific activities and their direct results, rather than scores on tests or assignments. Specific examples include proficiency checklists, teacher-kept journals, and "running records."
- *Costs*: Costs vary depending on the amount of teacher time per student is required by the observations. Thus time is a function of the amount of information kept (checklists are quicker than journals) and the number of students observed.
- *Outcomes*: Decoding A, Decoding B, Comprehension.
- *Example(s):* Reading Recovery (Clay, 1991); Success for All (Slavin et al., 1990); Four-Block Method (Cunningham, 1991); ELLI (OSU, 1998).

Pull-out program:

- *Definition*: The program identifies a subset of children from the whole class, and that subset alone participates in the program.
- *Description*: Participation may come either during normal class hours or in some kind of extended program, such as full day kindergarten or summer school. As with other features in the same class—grade limit, basic reading ability assumed—this feature limits and defines the methods, population, and outcomes targeted by the program.
- *Costs*: In itself it costs little, requiring only some kind of placement decision. Inasmuch as it is associated with more expensive features, however, such as one-on-one tutoring and small groups, pull-out programs tend to be expensive.

- *Outcomes*: Emergent Literacy, Decoding A, Decoding B, Comprehension.
- *Example(s):* Reading Recovery (Clay, 1991).

Reading canon:

- *Definition*: This is a complete list of books accepted by the program, a list often graduated for difficulty, but not necessarily a basal series. Books not on the list are excluded from the program.
- *Description*: A reading canon is an interesting alternative to a basal series, and it is the approach taken in Reading Recovery. The books are themselves trade books, and thus fit into a literature-based curriculum. At the same time, they are controlled for content and difficulty, enabling a certain measure of consistency and comprehensiveness across sites.
- *Costs*: Stocking libraries is expensive, and requiring each intervention to have a pre-defined library as its sole source of books might lead to heavy expenses, depending on how many of the books on the list the school already owns.
- *Outcomes*: Emergent Literacy, Decoding B, Comprehension, Critical Literacy.
- *Example(s):* Reading Recovery (Clay, 1991).

School-wide program:

- *Definition*: The program extends beyond individual students, classes, or grades. The school as a whole adopts a plan and implements it.
- *Description*: This feature usually involves a comprehensive change to nearly every level of school operations. It may take years to implement. It offers, however, a central school philosophy, professional development, and coherently designed organizational/structural features and classroom instruction features. This comprehensive approach, if implemented properly, can lead to significant long-term gains, as students benefit from a single, consistent approach to the curriculum over time. Examples are Success For All, Accelerated Schools, and Montessori schools, all of which have documented significant long-term gains maintained over years, in spite of having little else in common.
- *Costs*: Extremely high.
- *Outcomes*: Emergent Literacy, Decoding A, Decoding B, Comprehension, Critical Literacy.
- *Example(s):* ELLI (OSU, 1998).

Small groups:

- *Definition*: Children work together in small groups, either led by a teacher/ paraprofessional or led by the students themselves.
- *Description*: The small groups feature can be flexibly employed for a variety of reasons. As an option for increasing individual attention, it is a less expensive and less effective alternative to one-on-one tutoring (Juel, 1996). If the groups are student-led, this feature can be used in a program emphasizing student empowerment. Small groups can be associated with ability grouping, either a long-run grouping or even ad hoc groups that teachers put together to address a common problem shared by several students. Look for this feature to increase as schools go from half day to full day kindergarten.
- *Costs*: Small groups need not cost any extra, if teachers simply break existing classes into, for instance, four groups and circulate around the room. The more small groups are used to increase individual attention, however, the greater the likelihood that extra help—teachers or paraprofessionals—will be required.
- *Outcomes*: Emergent Literacy, Decoding A, Comprehension.
- *Example(s):* Success for All (Slavin et al., 1990); Four-Block Method (Cunningham, 1991); ELLI (OSU, 1998); Full Day Kindergarten (Humphrey, 1988).

Supplementary learning:

- *Definition*: Students spend extra time at school, focusing on essentially the same things they are doing in regular classes, but simply getting more time to do them.
- *Description*: This is not a derogatory category: all children need certain print experiences, linguistic abilities, and/or other environmental factors before they can really benefit from literacy instruction typically found in the first grade. For students who have less of this type of experience, Supplementary Teaching is designed to address that need. Extended day kindergarten and summer schools are environments well-suited for this.
- *Costs*: Supplementary learning costs can be quite high. In addition to requiring substantial extra teacher time, the costs of materials can escalate. If additional physical structures are required, such as the building of a new kindergarten classroom, costs can climb even further.

- *Outcomes*: Emergent Literacy, Decoding A.
- *Example(s):* Full Day Kindergarten (Humphrey, 1988).

Systematic learning:

- *Definition*: The program uses a comprehensive and sophisticated structure or set of structures that may allow for some individual flexibility, but which ultimately unify and organize the instruction.
- *Description*: Systematic learning tightens the link between features in the implemented theoretical/philosophical category and features in the organizational/structural category. This linkage organizes not just the classroom instruction features, but also the curriculum, outcomes measures, and even professional development. This is not to say that it is inflexibly rigid, though this feature may be incompatible with certain empowerment approaches like learning community or student empowerment. The feature should effect greater consistency among classroom instruction, grade levels, and outcomes measures. It is clearly visible in Success For All and arguably Reading Recovery.
- *Costs*: Systematic learning requires a strong theoretical base, considerable planning, and would likely benefit from an active professional development component, all of which will push up its costs. Once it is implemented, however, maintenance costs need not be high. In addition, once implemented, the explicit nature of the feature lend it high replicability, making its implementation in nearby schools less costly.
- *Outcomes*: Decoding A, Decoding B, Comprehension.
- *Example(s):* Reading Recovery (Clay, 1991); Success for All (Slavin et al., 1990); Four-Block Method (Cunningham, 1991); ELLI (OSU, 1998).

Trade books:

- *Definition*: Students read literature-based books, as opposed to books such as basal readers, which are constructed using controlled vocabulary and syntax.
- *Description*: A favorite of whole language approaches, trade books are the opposite extreme of basal readers. They offer children "authentic" and "natural" language, and are purported to be more interesting. For more on the advantages and disadvantages of trade books, see the entries on basal books and reading canons.
- *Costs*: Books are usually an expensive, one-time investment, though they can be used for many years, once purchased.
- *Outcomes*: Decoding B, Comprehension, Critical Literacy.
- *Example(s):* Success for All (Slavin et al., 1990); Four-Block Method (Cunningham, 1991).

Classroom Instruction Features

Features in this category are related to the specific instructional methods used by teachers or other paraprofessionals in the intervention to teach children. These not only have a direct relationship with outcomes, but they also usually have the greatest direct impact on outcomes.

Many of these features have little to no costs associated with them. That is because they take place in a classroom with a teacher that have already been budgeted for. In other words, the structures in which the instruction takes place is where the costs become a factor, but the actual method of instruction itself is usually not a cost concern. Of course, without a classroom, there can be no classroom instruction.

Big Books:

- *Definition*: An oversize book that the students read together as a class in a participatory way.
- *Description*: Participation may include student actors, readers, drawings (which may be pasted into the book), etc. While many Big Books are commercially available, a Big Book does not necessarily have to be.
- *Costs*: Using Big Books requires multiple copies of each book in the classroom and a larger copy for the whole class to use. Beyond this expense, Big Books should not add any expenses.
- *Outcomes*: Emergent Literacy, Decoding A, Decoding B, Comprehension, Critical Literacy.

- *Example(s):* Success for All (Slavin et al., 1990); ELLI (OSU, 1998).

Cooperative learning:
- *Definition*: Students work together in groups toward common or individual goals.
- *Description*: This instructional method groups students of mixed ability to collaborate on some kind of project. In additional to improving specific literacy outcomes, it may also improve students' social skills.
- *Costs*: No additional.
- *Outcomes*: Comprehension, Critical Literacy.
- *Example(s):* Success for All (Slavin et al., 1990).

Creative writing:
- *Definition*: Students write stories or other imaginative material on their own, sometimes with guidance.
- *Description*: Creative writing is a more advanced form of writing than journals. It requires the combined use of the imagination and structure. While it may not require the same level of ability in manipulating information as essays, creative writing assumes an ability to use (not just be aware of) story structures, e.g., that stories have a beginning, middle, and end, that they usually involve some sort of conflict and resolution, etc. (See journals and essays.)
- *Costs*: No additional.
- *Outcomes*: Decoding B, Comprehension, Critical Literacy.
- *Example(s):* Reading Recovery (Clay, 1991); Success for All (Slavin et al., 1990); Four-Block Method (Cunningham, 1991); ELLI (OSU, 1998).

Drama:
- *Definition*: Program participants stage a written selection, interacting directly with the text and situating themselves within it.
- *Description*: This feature, by involving students in acting, brings a multisensory aspect to reading. Because dramatic response requires translating a visual medium into motor and oral media, it requires an element of interpretation, emphasizing the distinction between reader and text, specifically the subjective response that readers bring from texts.
- *Costs*: No additional.
- *Outcomes*: Comprehension, Critical Literacy.
- *Example(s):* Success for All (Slavin et al., 1990); ELLI (OSU, 1998).

Echo or choral reading:
- *Definition*: A variant of paced oral reading, except children also read out loud along with the adult.
- *Description*: As with paced oral reading, because fluent reading is the goal, mistakes are not corrected and reading proceeds at a steady, natural pace.
- *Costs*: No additional.
- *Outcomes*: Decoding A, Comprehension.
- *Example(s):* ELLI (OSU, 1998).

Essays:
- *Definition*: Students respond in a self-conscious, organized text to a reading, problem, situation, etc.
- *Description*: Essays are a form of writing more advanced than journals. They force writers to organize their thoughts and express them logically, coherently, even hierarchically. It raises the awareness that writing follows its own patterns of structure and that knowledge itself can be organized. (See also journals and creative writing.)
- *Costs*: No additional.
- *Outcomes*: Decoding B, Comprehension, Critical Literacy.
- *Example(s):* ELLI (OSU, 1998).

Health education:
- *Definition*: The program uses improved health education and conditions as a means of indirectly improving instructional effectiveness.
- *Description*: One of the few classroom features that has an indirect relationship with literacy outcomes, the idea behind this feature is that healthy children will be more receptive to language (and any other) instruction.
- *Costs*: No additional, unless parents are involved (see "parent skills training" in the Parent Component section).

- *Outcomes*: Emergent Literacy, Decoding A, Decoding B, Comprehension, Emergent Literacy.

Interpreting/discussion:

- *Definition*: Teacher-led class discussion of reading, with emphasis on meaning, interpretation, critical response, critical dialogue, self-expression, etc.
- *Description*: This feature is fairly advanced, and presupposes at least a certain level of comprehension. Look for it in Whole Language, student-centered interventions or interventions that target the critical literacy outcome. This feature deepens comprehension and critical response by involving children in a guided conversation, which requires response and the ability to articulate the response coherently.
- *Costs*: No additional.
- *Outcomes*: Comprehension, Critical Literacy.
- *Example(s):* Success for All (Slavin et al., 1990); Four-Block Method (Cunningham, 1991).

Invented spelling:

- *Definition*: Children are taught basic spelling rules and are encouraged to write using those rules, without worrying about the correctness of the spelling.
- *Description*: This approach is used in a number of different programs. Its disadvantage is obvious, that is, that children are not learning (at least initially) to spell words correctly. The advantage to this approach, however, is that children are practicing writing in a rule-governed way. That is, they are generating words from rules, rather than from rote memory. Thus when they are introduced to correct spelling and the more complicated and irregular rules of spelling, they are cognitively prepared for them.
- *Costs*: No additional.
- *Outcomes*: Emergent Literacy, Decoding A, Decoding B.
- *Example(s):* Four-Block Method (Cunningham, 1991).

Journals:

- *Definition*: Students record their thoughts and experiences in regular accounts, usually informal.
- *Description*: Journals are a way for students to practice the other crucial aspect of literacy: writing (reading is the pedagogically dominant first crucial aspect). By keeping journals, students gain comfort and familiarity with expressing themselves in a medium other than oral. The relative informality of journal-keeping and the familiarity of content make writing more non-intimidating than other forms of writing, such as essays and creative writing. (See also essays and creative writing.)
- *Costs*: No additional.
- *Outcomes*: Emergent Literacy, Decoding A, Comprehension, Critical Literacy.
- *Example(s)*: Four-Block Method (Cunningham, 1991).

Meaning context/predicting:

- *Definition*: Children are introduced to the story before they read, and are encouraged to try and predict the outcome or otherwise interact with story structures prior to and separate from the actual narrative experience.
- *Description*: This feature is common to many different interventions and is highly compatible with almost any approach. By focusing on meaning and structures, students are forced to bridge a number of different outcomes, including Decoding A & B, Comprehension, and Critical Literacy.
- *Costs*: No additional.
- *Outcomes*: Decoding A, Decoding B, Comprehension, Critical Literacy.
- *Example(s):* Reading Recovery (Clay, 1991); Success for All (Slavin et al., 1990).

Multisensory activity:

- *Definition*: This approach emphasizes senses other than seeing and hearing to help students internalize the acts of reading.
- *Description*: Humans have five senses but depend disproportionately on sight and hearing, at least in school. This feature usually means the inclusion of the tactile sense—using a finger to trace letters, or to run under a line of text as it is read, clapping along as words are read—but it can also be generalized into some form of creative movement, e.g., dancing, drama, etc.
- *Costs*: No additional.
- *Outcomes*: Decoding A, Decoding B, Comprehension, Critical Literacy.

- *Example(s):* Success for All (Slavin et al., 1990); Four-Block Method (Cunningham, 1991); ELLI (OSU, 1998).

Pacing oral reading:

- *Definition*: Adults read to children—one-on-one or in groups—with the children following along (guided perhaps by a finger running under the text as it is read).
- *Description*: Students struggling to read, if they only hear themselves reading, may not have any idea of what fluent reading actually sounds like. Slow speeds are not fluid, and fast ones can cause mistakes. The children associate written text with fluid spoken language.
- *Costs*: No additional.
- *Outcomes*: Decoding A, Comprehension.
- *Example(s):* Reading Recovery (Clay, 1991); ELLI (OSU, 1998); Success for All (Slavin et al., 1990); Four-Block Method (Cunningham, 1991); Full Day Kindergarten (Humphrey, 1988).
- *Example(s):* ELLI (OSU, 1998).

Paired reading:

- *Definition*: The program puts two people together (of usually different abilities) to read. The stronger partner helps the weaker read.
- *Description*: Usually the emphasis is not on error correction, but rather helping with reading fluency. It was originally designed as a way of educating parents to read with their kids in a maximally productive way, but has since been extended to include paraprofessionals and even student peers.
- *Costs*: No additional.
- *Outcomes*: Comprehension.
- *Example(s):* Reading Recovery (Clay, 1991); ELLI (OSU, 1998); Success for All (Slavin et al., 1990); Four-Block Method (Cunningham, 1991); Full Day Kindergarten (Humphrey, 1988).

Reading drills:

- *Definition*: Program drills the participants on reading sub-skills, using specifically targeted, repetitive, and analytic exercises, e.g., flashcards with words all beginning with the same consonant.
- *Description*: Drills are a means of enabling students to practice and internalize what they have learned. While not the most glorified or appreciated of features, reading drills offer a way of strengthening students skills in certain highly abstract, systematized areas as phonics and grammar.
- *Costs*: No additional.
- *Outcomes*: Decoding A.
- *Example(s):* Full Day Kindergarten (Humphrey, 1988).

Scaffolding:

- *Definition*: Teachers model a complex activity to show students how to perform the activity; then, the activity is repeated with less and less teacher input as students perform the activity independently.
- *Description*: This method enables children to learn how to do complex tasks. Simple directions may be insufficient to explain how to do such tasks. Scaffolding is used for more "high level" tasks and would make little sense, for instance, in a skills-oriented lesson such as phonics.
- *Costs*: No additional.
- *Outcomes*: Decoding B, Comprehension, Critical Literacy.
- *Example(s)*: ELLI (OSU, 1998).

Self-Selected Reading:

- *Definition*: Students, rather than teachers, choose which books they read.
- *Description*: An approach compatible with student empowerment, self-selected reading dramatically increases the chances that children will like what they read, improving the chances of students habitually reading for pleasure. On the down side, if children choose books only from one genre, or consistently choose books that do not challenge them, then this approach may actually hinder reading outcomes. However, it does not seem that many schools are so extreme; including self-selected reading in an overall reading program should be sufficient to reap the benefits of the approach without endangering reading achievement.
- *Costs*: No additional.
- *Outcomes*: Decoding B, Comprehension, Critical Literacy.

- *Example(s):* Reading Recovery (Clay, 1991); Four-Block Method (Cunningham, 1991).

Silent individual reading:

- *Definition*: Children have time of their own to read silently, usually scheduled daily.
- *Description*: Teachers may or may not circulate, providing structured tutorial/individualized guidance or simply answering incidental questions. A staple of Whole Language and student-centered approaches, silent individual reading gives children the chance to practice independently what they have learned. Typically children may choose which materials they use, which again brings up the choice/comprehensiveness dilemma (see basal readers in the Structural/Organizational section).
- *Costs*: No additional.
- *Outcomes*: Decoding B, Comprehension, Critical Literacy.
- *Example(s):* Success for All (Slavin et al., 1990); Four-Block Method (Cunningham, 1991); ELLI (OSU, 1998).

Storytelling:

- *Definition*: Teacher reads stories out loud to students, usually in a classroom setting, rather than in a tutorial setting.
- *Description*: Storytelling is a near-universal staple of early reading instruction. It has two primary benefits: it makes children aware of the benefits of reading—that it is fun, exciting, etc.—even as it models reading—e.g., what texts sound like when read aloud and how to respond to their content.
- *Costs*: No additional.
- *Outcomes*: Emergent Literacy, Comprehension, Critical Literacy.
- *Example(s):* Success for All (Slavin et al., 1990); Four-Block Method (Cunningham, 1991); Full Day Kindergarten (Humphrey, 1988); ELLI (OSU, 1998).

Student teams:

- *Definition*: Students form teams and address problems or passages together, without much direct guidance from the teacher.
- *Description*: Consonant with features like paired reading and small groups, student teams are a means of improving problem-solving skills, empowering students, and fostering cooperation and collaborative skills. Teams can be as small as two, or they can be much larger. Usually, students within groups are of diverse abilities.
- *Costs*: No additional.
- *Outcomes*: Comprehension, Critical Literacy.
- *Example(s):* Success for All (Slavin et al., 1990); Four-Block Method (Cunningham, 1991).

Writing mechanics: **[revising, editing, capitalizing periods, etc.]**

- *Definition*: This features comprises activities that call attention to the rules and mechanics of writing.
- *Description*: Particular activities might include revising texts to make sure, for example, that all of the sentences have periods, and all of the sentences begin with a capital letter. Editing can range from simple and mechanical to more complex revisions.
- *Costs*: No additional.
- *Outcomes*: Decoding A, Decoding B, Comprehension.
- *Example(s):* Four-Block Method (Cunningham, 1991); Success for All (Slavin et al., 1990).

Worksheets/workbooks:

- *Definition*: Students fill out worksheets.
- *Description*: Usually skills-oriented, worksheets provide an inexpensive way for students to practice what they have learned. Their use may also free up teachers' time to concentrate on other tasks, such as small group instruction.
- *Costs*: Inexpensive.
- *Outcomes*: Decoding A, Comprehension.
- *Example(s):* Full Day Kindergarten (Humphrey, 1988); Success for All (Slavin et al., 1990); Four-Block Method (Cunningham, 1991).

Parent Involvement Features

Parent component features have two primary effects. The first is that they can directly affect outcomes. The second is that they can reinforce classroom instruction. The parent component can have features from a wide range of choices, ranging from inexpensive to extremely expensive. In the final analysis, a well-designed parent component can extend learning experiences out of the classroom and into all facets of a child's life.

Advocacy
- *Definition*: Program assists parents in advocating for their children to teachers or governmental agencies.
- *Description*: the program may intervene on behalf of children or schools over such issues as placement decisions, teacher perceptions of individuals, etc. This feature is often used to assist parents who do not understand how to work within the school system.
- *Costs*: Vary depending on number of cases and how long the advocacy is required.
- *Outcomes*: NA.
- *Example(s):* Carolina Abecedarian (Campbell & Ramey, 1994).

Book distribution
- *Definition*: The program distributes books to households that may have few.
- *Description*: Book distribution can occur in a number of ways. Lending library books is one way, and many schools also give books to families. A third route is to send home "book sacks," which contain a book and optional advice on how to share that book with the child.
- *Costs*: Anything dealing with books can be expensive, especially if the school gives books away.
- *Outcomes*: Emergent Literacy, Decoding A, Comprehension.
- *Example(s):* ELLI (OSU, 1998).

Family literacy:
- *Definition*: The program provides literacy instruction to entire families.
- *Description*: Children of illiterate parents are particularly at risk of not learning to read. This feature addresses both adult illiteracy and literacy acquisition of the school-aged children at once in a comprehensive program.
- *Costs*: Very high.
- *Outcomes*: Emergent Literacy, Decoding A, Comprehension.
- *Example(s):* Benjamin & Lord, 1996; Even Start (Connors-Tadros, 1996).

Health care assistance:
- *Definition*: Assisting parents in providing children with health needs.
- *Description*: This assistance may include fortified formulas, diapers, medical care, meals, nutrition assistance, mental health referrals, chemical dependence referrals, dental care, etc.).
- *Costs*: While costs will vary according to the numbers of families involved and the numbers of services provided, costs for this feature will likely be high.
- *Outcomes*: NA.
- *Example(s):* Carolina Abecedarian (Campbell & Ramey, 1994).

Paired reading (see paired reading in the Classroom Instruction category)
- *Definition*: The program puts two people together (of usually different abilities) to read. The stronger partner (here, the parent) helps the weaker read.
- *Description*: This feature is no different here than it is in the Classroom Instruction category. It is a very common parent feature, and many interventions require the parents to sign a contract promising to spend a specified amount of time reading with their child every night. In addition to affecting reading outcomes directly, this feature will also affect them indirectly by reinforcing classroom instruction features.
- *Costs*: No additional, unless training is required.
- *Outcomes*: Comprehension.
- *Example(s):* Reading Recovery (Clay, 1991).

Parent awareness:

- *Definition*: The program keeps the parents informed of program features and events through outreach efforts.
- *Description*: Examples might include informational nights, newsletters; etc. As with parent conferences, this feature's relationship to outcomes may be indirect: increased awareness may help the parents reinforce classroom instruction. One common example is parent attendance in classroom activities.
- *Costs*: Low.
- *Outcomes*: NA.
- *Example(s):* Success for All (Slavin et al., 1990); ELLI (OSU, 1998).

Parent conferences

- *Definition*: Teachers meet directly with parents to discuss student progress.
- *Description*: The primary benefit to outcomes in this feature may be indirect. The communication between teachers and parents in this feature will help the parents reinforce classroom instruction—by keeping an eye on their child at homework time, by helping their child out with a specific problem, etc.
- *Costs*: Costs here are determined by the amount of time teachers spend with parents and the number of students they have.
- *Outcomes*: NA.
- *Example(s):* Benjamin & Lord, 1996.

Parent participation in curricular instruction

- *Definition*: Parents participate in the construction of the curriculum.
- *Description*: This feature is compatible with the learning community feature described in the Theoretical/Philosophical category above. By participating, parents involve themselves more in the school community, reinforcing the school at home and the home at school.
- *Costs*: No additional.
- *Outcomes*: Vary.
- *Example(s):* Benjamin & Lord, 1996.

Parent professional assistance

- *Definition*: The program provides job seeking assistance to parents.
- *Description*: Parents are provided with job training, including GED preparation, job seeking skills (e.g., interviewing techniques, resume-building).
- *Costs*: Vary. If the program provides a one-time workshop open to parents, then costs would be relatively low. On the other hand, one-on-one counseling or assistance could be more expensive.
- *Outcomes*: NA.
- *Example(s):* Even Start (Connors-Tadros, 1996).

Parent skills training:

- *Definition*: The program provides parenting instruction to families.
- *Description*: Similar to family literacy, and often combined with it, parent skills training also addresses the family as a system. Parents are educated with regards to health, teaching their children, and other needs.
- *Costs*: One of the debates central to this feature is to what degree schools should intervene. At one extreme, the family may lose its sense of autonomy and feel invaded, and at the other, the parents receive no training at all. Depending on how schools negotiate this dilemma in implementing this feature, costs can vary.
- *Outcomes*: Emergent Literacy, Decoding A, Comprehension.
- *Example(s):* Success for All (Slavin et al., 1990); Even Start (Connors-Tadros, 1996).

Parent volunteers

- *Definition*: Parents volunteer their time to participate in programs.
- *Description*: The tremendous variety of ways parents can participate in schools makes assigning outcomes difficult. Parent can act as paraprofessionals and participate in a paired reading feature, which may affect Comprehension, or they may act as babysitters on a field trip.
- *Costs*: Parent volunteers actually save staff by requiring fewer paraprofessionals or other staff.
- *Outcomes*: Vary.
- *Example(s):* Benjamin & Lord, 1996.

Reading instruction training

- *Definition*: The program trains parents how to read with their children.
- *Description*: Parents often want advice or guidance in specific ways of reading with their children. This feature provides that advice. This can be done in any number of ways: ongoing parent training workshops, newsletters, conferences, book sacks, etc.
- *Costs*: Depend on the chosen method of training. Developing book sacks could be a one-time expense that could be used for years. Ongoing parent training could be quite expensive. An advice column in a preexisting newsletter could be quite inexpensive.
- *Outcomes*: Comprehension.
- *Example(s):* Reading Recovery (Clay, 1991); ELLI (OSU, 1998).

Support services:

- *Definition*: Providing support services to parents.
- *Description*: This assistance may include transportation, custodial childcare, translators, home visits, and referrals (e.g., services for battered women).
- *Costs*: Can be high for services such as childcare but low for services such as referrals.
- *Outcomes*: NA.
- *Example(s):* Carolina Abecedarian (Campbell & Ramey, 1994).

APPENDIX C

LIST OF FUNDED PROGRAMS

Appendix C

List of Funded Projects

	Corporation Name	Corp Code	Sch Code	School Name	Project
1	Alexandria Com School Corp	5265	4997	Cunningham Elementary School	RR
			5069	Marie Thurston Elementary School	RR
			5001	Orestes Elementary School	RR
2	Anderson Community School Corp	5275	5129	Shadeland Elementary School	RR
			5141	Westvale Elementary School	RR
3	Baugo Community Schools	2260	1709	Harley Holben Elementary Sch	RR
4	Beech Grove City Schools	5380	5457	Central Elementary School	RR
5	Blackford County Schools	0515	0501	Southside Elementary School	RR
6	Blue River Valley Schools	3405	2803	Blue River Valley Elem Sch	RR
7	Clarksville Com School Corp	1000	0841	George Rogers Clark Elem Sch	RR
			0845	Greenacres Elementary School	RR
8	Cloverdale Community Schools	6750	7082	Cloverdale Elementary School	RR
9	Crown Point Community Sch Corp	4660	3769	Douglas MacArthur Elem Sch	RR
10	East Allen County Schools	0255	0073	Monroeville School	RR
11	East Noble School Corp	6060	6477	North Side Elementary School	RR
			6478	South Side Elementary School	RR
12	Elkhart Community Schools	2305	1765	Beardsley Elementary School	RR
			1769	Beck Elementary School	RR
			1773	Daly Elementary School	RR
			1777	Hawthorne Elementary School	RR
			1673	Osolo Elementary School	RR
			1801	Roosevelt Elementary School	RR
13	Fayette County School Corp	2395	1917	Maplewood Elementary School	RR
14	Fort Wayne Community Schools	0235	0275	Arlington Elementary School	RR
			0153	Brentwood Elementary School	RR
			0151	Bunche Elementary School	RR
			0136	Fairfield Elementary School	RR
			0157	Forest Park Elementary School	RR
			0221	Francis M Price Elem Sch	RR
			0161	Franke Park Elementary School	RR
			0154	Fred H Croninger Elem Sch	RR
			0162	Glenwood Park Elementary Sch	RR
			0178	Harrison Hill Elementary Sch	RR
			0189	Indian Village Elementary Sch	RR
			0164	J Wilbur Haley Elementary Sch	RR
			0193	John S Irwin Elementary Sch	RR
			0270	Lincoln Elementary School	RR
			0197	Lindley Elementary School	RR
			0261	Louis C Ward Elementary Sch	RR
			0186	Mabel K Holland Elem Sch	RR

			0205	Maplewood Elementary School	RR
			0217	Northcrest Elementary School	RR
			0077	Pleasant Center Elem School	RR
			0239	Robert C Harris Elem Sch	RR
			0233	Saint Joseph Central School	RR
			0269	Washington Center Elem Sch	RR
			0273	Waynedale Elementary School	RR
			0134	Weisser Pk/Whitney Young Ele	RR
			0209	Willard Shambaugh Elem Sch	RR
15	Franklin Community School Corp	4225	3461	Northwood Elementary School	RR
16	Franklin County Com Sch Corp	2475	2125	Brookville Elementary School	RR
			2082	Laurel School	RR
17	Gary Community School Corp	4690	4117	Alain L Locke Elementary Sch	RR
			4065	Brunswick Elementary School	RR
			4081	Charles R Drew Elementary	RR
			4149	Ernie Pyle Elementary School	RR
			4137	Horace S Norton Elem Sch	RR
			4109	Kuny Elementary School	RR
			4087	Spaulding Elementary School	RR
28	Goshen Community Schools	2315	1829	Chamberlain Elementary Schoo	RR
			1833	Chandler Elementary School	RR
			1843	Parkside Elementary School	RR
			1845	Riverdale Elementary School	RR
			1641	Waterford Elementary School	RR
29	Greencastle Community Sch Corp	6755	7097	Mary Emma Jones Primary Sch	RR
20	Greensburg Community Schools	1730	1285	Washington Elementary School	RR
21	Harrison-Wash Com School Corp	1885	1413	Gaston Elementary School	RR
22	Huntington Co Com Sch Corp	3625	3073	Horace Mann Elementary School	RR
23	Jennings County Schools	4015	3397	North Vernon Elem Sch	RR
24	Joint Educational Services in Spec Ed	5450			RR
25	Knox Community School Corp	7525	7845	Knox Community Elementary Sch	RR
26	Lakeland School Corporation	4535	3731	Parkside Elementary School	RR
			3741	Wolcott Mills Elementary Sch	RR
27	Lebanon Community School Corp	0665	0569	Stokes Elementary School	RR
28	M S D Perry Township	5340	5322	Mary Bryan Elementary Sch	RR
29	M S D Southwest Allen County	0125	0048	Indian Meadows Elementary Sch	RR
30	M S D Steuben County	7615	7905	Pleasant Lake Elem Sch	RR
31	M S D Washington Township	5370	5436	Fox Hill Elementary Sch	RR
32	Madison Consolidated Schools	3995	3305	Dupont Elementary School	RR
			3321	Rykers' Ridge Elem Sch	RR
33	Manchester Community Schools	8045	8633	Manchester Elem School	RR
34	Marion Community Schools	2865	2401	Lincoln Elementary School	RR
			2413	Southeast Elementary School	RR
35	Michigan City Area Schools	4925	4837	Park Elementary School	RR
36	Middlebury Community Schools	2275	1734	Orchard View Sch	RR
37	Mill Creek Community Sch Corp	3335	2677	Mill Creek West Elementary	RR
38	Monroe County Com Sch Corp	5740	6189	Clear Creek Elementary School	RR
			6134	Lakeview Elementary School	RR
			6225	Templeton Elementary School	RR
39	Muncie Community Schools	1970	1469	Garfield Elementary School	RR
			1470	Grissom Elem School	RR
			1482	South View Elementary School	RR
			1509	Sutton Elementary School	RR
40	New Albany-Floyd Co Con Sch	2400	1949	Fairmont Elementary School	RR
41	North Lawrence Com Schools	5075	4921	Stalker Elementary School	RR
42	North Miami Community Schools	5620	6051	North Miami Elem School	RR

43	Northeastern Wayne Schools	8375	8928	Northeastern Elementary Sch	RR
44	Northwest Allen County Schools	0225	0069	Arcola School	RR
45	Oregon-Davis School Corp	7495	7818	Oregon-Davis Elementary Sch	RR
46	Paoli Community School Corp	6155	6587	Throop Elementary School	RR
47	Penn-Harris-Madison Sch Corp	7175	7361	Elm Road Elementary School	RR
			7365	Elsie Rogers Elem School	RR
			7377	Moran Elementary School	RR
			7323	Walt Disney Elementary School	RR
48	Peru Community Schools	5635	6113	Holman Elementary School	RR
49	Randolph Southern School Corp	6805	7113	Randolph Southern Elem Sch	RR
50	Richland-Bean Blossom C S C	5705	6145	Ellettsville Elem School	RR
51	Rochester Community Sch Corp	2645	2181	Columbia Elementary School	RR
52	Rush County Schools	6995	7287	Rushville Elementary School	RR
53	School City of East Chicago	4670	3945	Abraham Lincoln Elem Sch	RR
54	School City of Mishawaka	7200	7473	Beiger Elem & Jr High Sch	RR
			7481	Emmons Elementary School	RR
55	School Town of Highland	4720	4301	Southridge Elementary School	RR
56	Scott County School District 1	7230	7630	Austin Elementary School	RR
57	Seymour Community Schools	3675	3153	Seymour-Jackson Elem Sch	RR
58	South Newton School Corp	5995	6431	South Newton Elementary Sch	RR
59	Southwestern-Jefferson Co Con	4000	3341	Southwestern Elementary School	RR
60	Southwestern Con Sch Shelby Co	7360	7703	Southwestern Elementary Sch	RR
61	Spencer-Owen Community Schools	6195	6605	Gosport Elementary School	RR
			6601	Patricksburg Elementary Sch	RR
			6617	Spencer Elementary School	RR
62	Switzerland County School Corp	7775	7985	Jefferson-Craig Elem Sch	RR
63	Tippecanoe Valley School Corp	4445	2139	Akron Elementary School	RR
			3603	Mentone Elementary School	RR
64	Tri-Creek School Corp	4645	3753	Oak Hill Elementary School	RR
			3848	Three Creeks Elem School	RR
65	Union-North United School Corp	7215	7400	LaVille elementary School	RR
66	Warsaw Community Schools	4415	3661	Jefferson Elementary School	RR
67	Wawasee Community School Corp	4345	3635	Milford School	RR
			3625	North Webster Elementary School	RR
			3637	Syracuse Elementary School	RR
68	Westfield-Washington Schools	3030	2492	Shamrock Springs Elementary	RR
			2495	Washington Elementary School	RR
69	Whiting School City	4760	4361	Nathan Hale Elementary School	RR
70	Whitley Co Cons Schools	8665	9179	Coesse School	RR
			9196	Mary Raber Elementary School	RR

1	Northwest Allen County Schools	0225	0069	Arcola School	ELLI
2	East Allen County Schools	0255	0053	Leo Elementary School	ELLI
3	New Albany-Floyd Co Con Sch	2400	1974	Mount Tabor School	ELLI
4	M S D Decatur Township	5300	5185	Stephen Decatur Elem Sch	ELLI

1	Bremen Public Schools	5480	5943	Bremen Elem/Middle School	FDK
2	Crawfordsville Com Schools	5855	6305	Anna Willson Kindergarten Ce	FDK
3	Crown Point Community Sch Corp	4660	3769	Douglas MacArthur Elem Sch	FDK
4	Fayette County School Corp	2395	1917	Maplewood Elementary School	FDK
5	Madison Consolidated Schools	3995	3327	Anderson Elementary School	FDK
6	South Ripley Com Sch Corp	6865	7178	South Ripley Elementary School	FDK
7	Twin Lakes School Corp	8565	9129	Eastlawn Elementary School	FDK

1	Bartholomew Con School Corp	0365	0328	Clifty Creek Elementary Sch	OELI
			0374	Fodrea Community School	OELI
2	Brownsburg Community Sch Corp	3305	2711	Eagle Elementary Sch	OELI
3	Brownsburg Community Sch Corp	3305	2717	Harris Elementary School	OELI
4	Brownsburg Community Sch Corp	3305	2719	Lincoln Elementary School	OELI
5	Brownsburg Community Sch Corp	3305	2723	White Lick Elementary School	OELI
6	Carmel Clay Schools	3060	2509	Carmel Elementary School	OELI
			2508	Cherry Tree Elem Sch	OELI
			2510	College Wood Elementary Sch	OELI
			2518	Forest Dale Elementary Schoo	OELI
			2516	Mohawk Trails Elementary Sch	OELI
			2513	Orchard Park Elementary Sch	OELI
			2512	Smoky Row Elementary Sch	OELI
			2507	Woodbrook Elementary School	OELI
7	Community Schools of Frankfort	1170	1020	Suncrest Elementary Sch	OELI
8	Daleville Community Schools	1940	1405	Daleville Elementary School	OELI
9	Eagle-Union Community Sch Corp	0630	0514	Eagle Elementary School	OELI
			0513	Pleasant View Elem School	OELI
			0541	Union Elementary School	OELI
10	East Noble School Corp	6060	6477	North Side Elementary School	OELI
			6465	Rome City Elem & Middle Sch	OELI
			6478	South Side Elementary School	OELI
			6485	Wayne Center Elem Sch	OELI
			8376	Daniel Wertz Elementary Sch	OELI
11	Evansville-Vanderburgh Sch	7995	8293	Fairlawn Elementary School	OELI
			8309	Harper Elementary School	OELI
			8357	Stringtown Elementary School	OELI
			8365	Vogel Elementary School	OELI
12	Fremont Community Schools	7605	7881	Fremont Elementary School	OELI
13	Goshen Community Schools	2315		Model Elementary School	OELI
14	Greater Clark County Schools	1010	0825	Jonathan Jennings Elem Sch	OELI
			0877	Spring Hill Montessori Schoo	OELI
15	Greensburg Community Schools	1730	1277	Billings Elementary School	OELI
			1285	Washington Elementary School	OELI
16	Greenwood Community Sch Corp	4245	3477	Greenwood Northeast Elem Sch	OELI
17	Indianapolis Public Schools	5385	5498	Cold Spring School	OELI
18	Logansport Community Sch Corp	0875	0713	Columbia Elementary School	OELI
			0709	Fairview Elementary School	OELI
			0705	Franklin Elementary School	OELI
			0711	Landis Elem Sch	OELI
19	M S D Southwest Allen County	0125	0065	Lafayette Central Elem Sch	OELI
20	M S D Warren Township	5360	5369	Eastridge Elementary School	OELI
			5370	Hawthorne Elementary School	OELI
			5395	Warren Early Childhood Ctr	OELI
21	M S D Washington Township	5370	5442	Eastwood Middle School	OELI
			5421	Harcourt Elementary School	OELI
22	Madison-Grant United Sch Corp	2825	2301	Liberty Elementary School	OELI
			2329	Park Elementary School	OELI
			5037	Summitville School	OELI
23	Michigan City Area Schools	4925	4821	Joy Elementary School	OELI
24	Michigan City Area Schools	4925	4837	Park Elementary School	OELI
25	Mooresville Con School Corp	5930	6375	Neil Armstrong Elem Sch	OELI
26	Mooresville Con School Corp	5930	6381	Newby Memorial Elem Sch	OELI

27	Mooresville Con School Corp	5930	6385	North Madison Elem Sch	OELI
28	Mooresville Con School Corp	5930	6387	Northwood Elementary School	OELI
29	Mooresville Con School Corp	5930	6393	Waverly Elementary School	OELI
30	Noblesville Schools	3070	2541	Forest Hill Elementary School	OELI
			2538	Hazel Dell Elem School	OELI
			2523	Hinkle Creek Elementary School	OELI
			2529	North Elementary School	OELI
			2533	Stony Creek Elementary School	OELI
31	North Adams Community Schools	0025	0009	Monmouth Elementary School	OELI
			0037	Northwest Elementary	OELI
			0041	Southeast Elementary School	OELI
32	North Gibson School Corp	2735	2257	Lowell Elementary School	OELI
33	Randolph Central School Corp	6825	7146	Deerfield Elementary School	OELI
			7133	O R Baker Elementary School	OELI
			7145	Willard Elem School	OELI
34	Richland-Bean Blossom C S C	5705	6145	Ellettsville Elem School	OELI
			6117	Stinesville Elementary School	OELI
35	Richmond Community School Corp	8385	9009	Baxter Elementary School	OELI
			9003	C R Richardson Elem Sch	OELI
			9013	Charles Elementary School	OELI
			9014	Crestdale Elementary School	OELI
			9017	Fairview Elementary School	OELI
			8947	Highland Heights Elem Sch	OELI
			9033	Parkview Elementary School	OELI
			8943	Paul C Garrison Elem Sch	OELI
			9037	Starr Elementary School	OELI
			9045	Vaile Elementary School	OELI
			9053	Westview Elementary School	OELI
36	Rossville Con School District	1180	1033	Rossville Elementary School	OELI
37	Salem Community Schools	8205	8864	Bradie M Shrum Lower Elem	OELI
38	School City of Hobart	4730	4325	Ridge View Elementary School	OELI
39	School City of Mishawaka	7200	7469	Battell Elementary School	OELI
			7473	Beiger Elem & Jr High Sch	OELI
			7481	Emmons Elementary School	OELI
			7459	Fred J Hums Elementary School	OELI
			7485	Lasalle Elementary School	OELI
			7489	Mary Phillips Elem Sch	OELI
			7493	North Side Elementary School	OELI
			7499	Twin Branch Elementary School	OELI
40	School Town of Speedway	5400	5901	Arthur C Newby Elem School 2	OELI
			5897	Carl G Fisher Elem School 1	OELI
			5905	Frank H Wheeler Elem School	OELI
			5893	James A Allison Elem School	OELI
41	South Bend Community Sch Corp	7205	7545	Benjamin Harrison Elementary	OELI
			7617	Henry Studebaker Elementary	OELI
42	South Newton School Corp	5995	6431	South Newton Elementary Sch	OELI
43	South Putnam Community Schools	6705	7057	Fillmore Elementary School	OELI
44	Southern Wells Com Schools	8425	9057	Southern Wells Elem School	OELI
45	Southwestern-Jefferson Co Con	4000	3341	Southwestern Elementary School	OELI
46	Tipton Community School Corp	7945	8163	Washington Elementary School	OELI
47	University Schools	1870	1441	Burris Laboratory School	OELI
48	Vigo County School Corp	8030	8510	Adelaide De Vaney Elem Sch	OELI
			8537	Blanche E Fuqua Elem Sch	OELI
			8505	Davis Park Elementary School	OELI
			8609	West Vigo Elementary School	OELI
49	Wa-Nee Community Schools	2285	1743	Nappanee Elem School	OELI
			1735	Wakarusa Elem Sch	OELI

			1747	Woodview Elem School	OELI
50	Wawasee Community School Corp	4345	3635	Milford School	OELI
51	Wawasee Community School Corp	4345	3625	North Webster Elementary Sch	OELI
52	Wawasee Community School Corp	4345	3637	Syracuse Elementary School	OELI
53	Western School Corp	3490	2935	Western Primary School	OELI

APPENDIX D

SUMMARIES OF EARLY LITERACY INTERVENTION PROGRAMS

Even Start

—By Stacy Jacob and Jeffrey Bardzell

Program Summary

Even Start is an early intervention program, which aims to help break the poverty cycle by improving educational opportunities for low-income families. Since it is a family-oriented, preschool intervention, Even Start cannot be expected to directly influence most literacy outcomes; rather, the program aims to create a developmentally appropriate home environment. This approach should better prepare children for learning.

Even Start focuses on environmental change through adult education. The intervention offers courses in parenting skills, job search strategies, and some early childhood education. Because Even Start is a cooperative program that works with existing community resources, individual implementations look different.

At the national level, Even Start's core values emphasize that all children should be ready to learn; that schools should prepare all children for responsible citizenship, learning, and employment; that all adults should be able to read; and that schools should promote partnerships among parents, communities, and children.

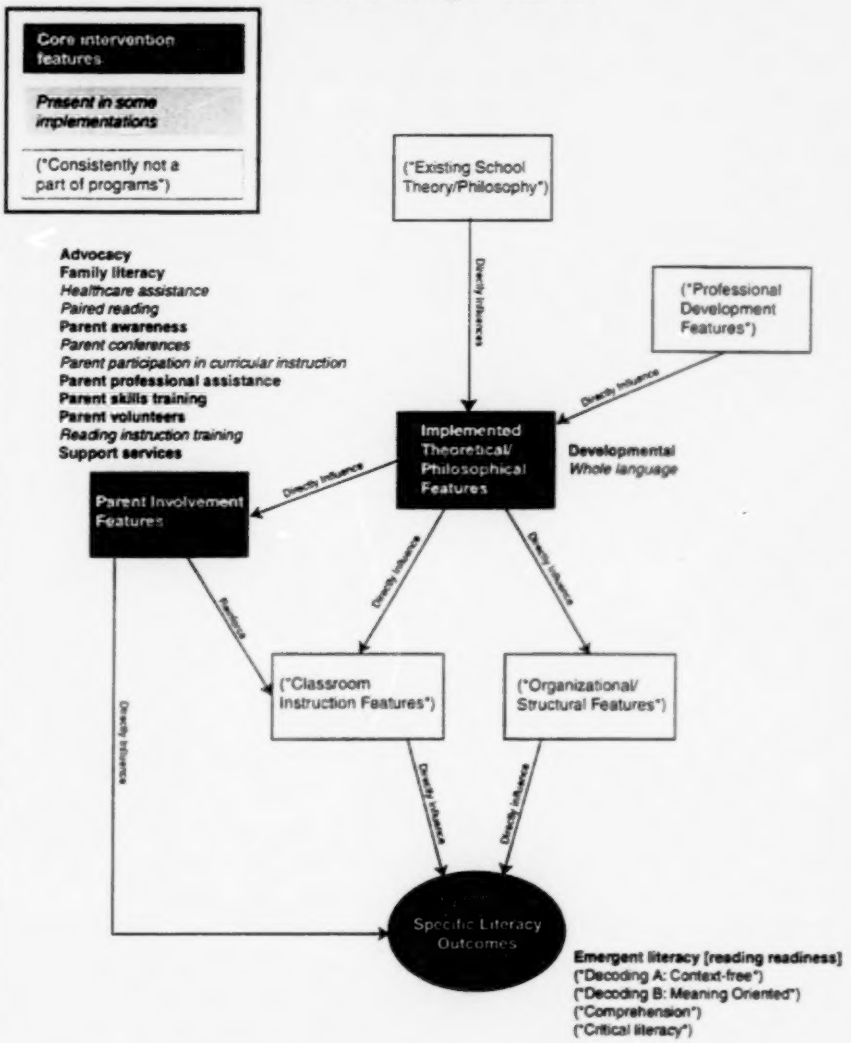
Targeted Literacy Outcomes

Again, since Even Start is a family-oriented, preschool intervention, it does not directly target literacy outcomes in the same way that other reading interventions (e.g., Four Blocks and Reading Recovery) do. However, the developmental and environmental emphasis is likely to affect emergent literacy. In addition, the long-term benefits of Even Start could indirectly affect all learning outcomes, though this would be difficult to measure.

Program Description

The program features of Even Start concentrate on the family and parents. This concentration is informed by both

Even Start Program Features


Core intervention features
Present in some implementations
("Consistently not a part of programs")
("Existing School Theory/Philosophy")
Directly influences
("Professional Development Features")
Directly influence
Implemented Theoretical/ Philosophical Features
Developmental
Whole language
Advocacy
Family literacy
Healthcare assistance
Paired reading
Parent awareness
Parent conferences
Parent participation in curricular instruction
Parent professional assistance
Parent skills training
Parent volunteers
Reading instruction training
Support services
Directly influence
Parent Involvement Features
Reinforce
Directly influence
Directly influence
("Classroom Instruction Features")
("Organizational/ Structural Features")
Directly influence
Directly influence
Directly influence
Specific Literacy Outcomes
Emergent literacy [reading readiness]
("Decoding A: Context-free")
("Decoding B: Meaning Oriented")
("Comprehension")
("Critical literacy")

A quick glance at the figure above reveals that Even Start is not in itself a comprehensive literacy intervention. It does not address many of the feature categories, and the majority of the literacy outcomes are not directly targeted. Instead, the heavy emphasis on parent involvement along with the presence of theoretical/philosophical features indicates that the Even Start design should be conceived of as a highly targeted supplement to a community's early childhood education plan. It is designed to step in where traditional education might be insufficient to handle the special needs of communities with high percentages of students in at-risk situations. Specifically, Even Start aims to improve the health of whole families and bring them into their communities.

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whole language and especially developmental theories of learning.

Organizational/Structural Features

Because Even Start is implemented differently in every community, it is difficult to make generalizations about organizational and structural features. All Even Start interventions have the shared goal of helping pre-first grade children, and this goal is accomplished primarily through parent education.

Classroom Instruction Features

Features in this category vary from preschool to preschool and are not explicitly outlined in the Even Start design.

Professional Development Features

Professional development was not explicitly addressed in the Even Start literature. This would suggest that professional development is primarily left up to the communities that implement the intervention.

Parental Involvement Features

This feature category is the most important one in Even Start. Although these features vary by location, there is greater commonality among features in this category than in the others.

Generally speaking, Even Start utilizes advocacy, family literacy, health care assistance, parental awareness, parent conferences, parent participation in curricular instruction, parent professional assistance, parent skills training, and support services.

These features illustrate that Even Start is more focused on the family unit as a whole and how it fits into its community than it is on individual students in the classroom. Many of the features are designed to help parents succeed both as parents and professionally. Thus, the direct goal of Even Start is the health of family, and individual children's learning outcomes are seen as dependent on the health and success of their families—starting with the parents.

Research Base

To date, there is relatively little research on the Even Start program. Moreover, because each Even Start program is different, it is difficult to make generalizations about the program. There are quite a few studies that describe particular implementations, evaluating their effectiveness, but there is little overall research on Even Start as a national program.

The Even Start program does, however, cite several longitudinal studies, such as the Perry Preschool Project and the Carolina Abecedarian Project. These studies found positive long-term effects on child learning with pre-kindergarten intervention methods, and Even Start made use of many of the methods in these programs. But Even Start works less directly with the children themselves than did either the Perry Preschool Project or the Carolina Abecedarian Project. Instead, the Even Start program is more intensive in its focus on parental involvement.

Summary: Program Strengths

The foundation for the ideas on which Even Start is based (i.e., programs such as the Perry Preschool Program) have a solid research base that is well documented. The parental involvement features for most Even Start programs are highly developed and well done. Involving parents early in the process can only improve children's long-term chances for success.

Summary: Program Limitations

The Even Start program is not as intense an experience for children as other pre-kindergarten experiences (e.g., The Perry Preschool Project, The Carolina Abecedarian Project). Even Start is more oriented towards the family unit. This focus is not a problem as long as schools have a successful preschool program in place.

Another potential limitation is the extent to which Even Start must be adapted by local communities. In communities that have the desire and resources to make it work, Even Start could be highly successful. But in communities without high levels of personal, institutional, or monetary commitment, Even Start's lack of a centrally defined program could result in limited success.

Contact Information

Even Start Family Literacy Program (1999). Available at http://www.ets.uidaho.edu/cdhd/evenstart/evenstart-whitis.htm

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Four Blocks

Early Literacy Intervention Program Summary

—By Kim Manoil and Jeffrey Bardzell

Program Summary

Multi-level, Multi-Method Instruction, commonly referred to as the Four Blocks Method, is a framework that provides an organized, systematic structure for providing early literacy instruction. The program is primarily used in first grade but has also been applied to other early grade levels.

The Four Block framework is designed for children with a wide range of abilities. Its design implements a wide variety of highly adaptable literacy instruction techniques that allow teachers to avoid ability grouping altogether. These techniques fit into an overall framework comprising four blocks: Guided Reading, Self-Selected Reading, Writing, and Working with Words.

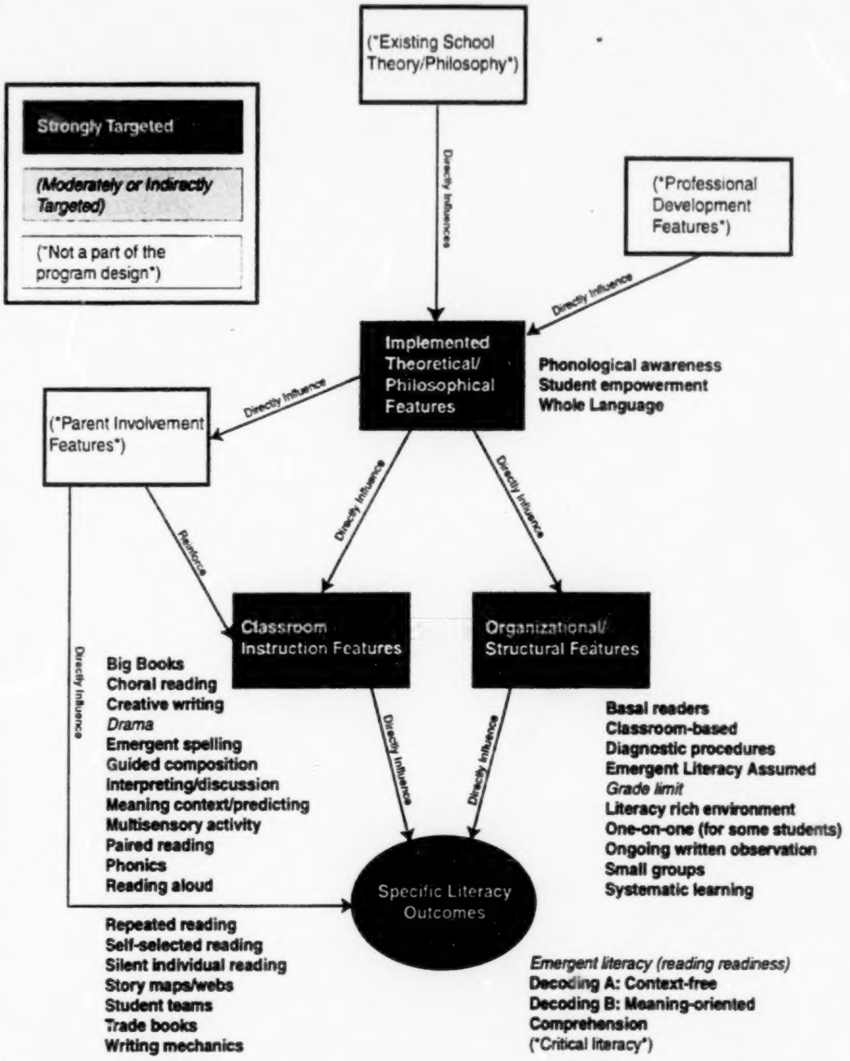
Targeted Literacy Outcomes

The Four Blocks Method focuses on three intermediary literacy outcomes: both types of decoding (context-free and meaning-oriented) and comprehension. This focus provides a balanced, intermediary literacy instructional framework that develops basic reading skills.

Although many aspects of Four Blocks assume that children have acquired emergent literacy skills (knowledge of letters and the alphabet, narrative and non-narrative structures), some of its techniques target instruction in these areas. These include "pretend reading" (telling the story of a familiar book without actually reading the words) and "picture reading" (talking about the pictures in the book).

Furthermore, the Four Blocks framework does not explicitly target critical literacy skills, although the program may foster such development as a result of the intermediary reading foundation skills it provides and the variety of instructional techniques included in the program.

Four Blocks Program Features


Strongly Targeted
(Moderately or Indirectly Targeted)
(*Not a part of the program design*)
(*Existing School Theory/Philosophy*)
Directly Influences
(*Professional Development Features*)
Directly Influence
Implemented Theoretical/ Philosophical Features
Phonological awareness
Student empowerment
Whole Language
Directly Influence
(*Parent Involvement Features*)
Directly Influence
Directly Influence
Reinforce
Classroom Instruction Features
Organizational/ Structural Features
Directly Influence
Big Books
Choral reading
Creative writing
Drama
Emergent spelling
Guided composition
Interpreting/discussion
Meaning context/predicting
Multisensory activity
Paired reading
Phonics
Reading aloud
Repeated reading
Self-selected reading
Silent individual reading
Story maps/webs
Student teams
Trade books
Writing mechanics
Directly Influence
Directly Influence
Basal readers
Classroom-based
Diagnostic procedures
Emergent Literacy Assumed
Grade limit
Literacy rich environment
One-on-one (for some students)
Ongoing written observation
Small groups
Systematic learning
Specific Literacy Outcomes
Emergent literacy (reading readiness)
Decoding A: Context-free
Decoding B: Meaning-oriented
Comprehension
(*Critical literacy*)

The Four Blocks Method takes a balanced, comprehensive approach to reading instruction. The program implements a wide range of classroom instructional techniques (e.g., phonics, self-selected reading, predicting, guided composition) that are based on a balanced theoretical approach (phonics and whole language) to reading instruction. Although this framework is quite systematic, teachers are able to modify structural aspects (small groups, one-on-one instruction) when their ongoing written observations reveal that children need additional or modified instruction. The details of professional development and parent involvement are left up to individual schools.

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Program Description

The Four Blocks Method is a systematic framework for instruction in intermediary literacy skills (see figure). The wide array of program features that work together to foster the acquisition of these reading outcomes are described in more detail below.

Organizational/Structural Features

The Four Blocks Method's wide range of organizational and structural features enable it to reach children with a variety of ability levels and learning styles.

The program provides a framework for systematic classroom-based language arts instruction. The language arts instructional time is intended to be divided into four 30-40 minute blocks, which are performed daily: Guided Reading, Self-Selected Reading, Writing, and Working with Words.

Diagnostic procedures, such as ongoing written observation, are used within the classroom. Teachers meet with students individually on a regular basis to take anecdotal notes on their reading. Individual conferences are held with children to discuss the books they are reading in the self-selected reading block. Small group and informal one-on-one instruction are also provided for students who are not reading at their instructional level.

Classroom Instruction Features

The Guided Reading Block begins as a teacher-led large group reading time and eventually shifts to students reading with partners or alone. Although basal readers have traditionally been used in this block, teachers also use other materials such as Big Books and trade books.

The Self-Selected Block involves children reading trade books alone or with partners. As a part of this block, children take turns sharing their books with the whole class. The Writing Block usually involves a brief (10 minute) mini-lesson to the entire class followed by individual student writing and editing.

In each of the three preceding blocks, there is a back-and-forth movement between individual and classwide instruction, which fosters both individual skills and a literate community.

The Words Block involves teacher-led and small group activities that reinforce reading and spelling patterns. For example, children practice learning to read and spell words posted on the word wall through chanting, clapping, and writing activities. Children also manipulate letters to make words called out by their teacher in the "making words" activity.

Professional Development Features

There is no standard professional development component for the Four Blocks Method. The model assumes that professional development and training will take on various forms depending on the school and availability of professionals knowledgeable of the program. Books, videos, and Internet news groups are available for training purposes. Some teachers also use study groups.

Parent Involvement Features

The Four Blocks Method also lacks a standard parent involvement feature. The program leaves the details of this component up to the individual school.

Research Base

Relatively little research has been conducted on the Four Blocks framework. Research that has been conducted to date indicates that children show gains in the areas of context-free decoding (A) and meaning-oriented decoding (B) as well as comprehension. Since these are the targeted outcomes, these findings are encouraging to the program.

However, most of the research lacked proper controls. Thus, additional research needs to be conducted to verify these findings.

Summary: Program Strengths

The Four Blocks Method provides a balanced framework for literacy instruction for children with various ability levels and learning styles. Its variety of instructional techniques appropriately emphasizes the core reading outcomes. This type of program ensures that instructional time is balanced across the various aspects of literacy instruction: reading with others (Guided Reading), selecting materials to read alone (Self-Selected Reading), experimenting with and composing within the structure of written language (Writing), and learning spelling and reading patterns (Working with Words). This balanced, comprehensive approach seems likely to help children become more skilled in all areas of literacy.

Although it is a classroom-wide approach, the program is flexible enough to allow for individual and small group instruction when needed.

The comprehensiveness and flexibility of the Four Blocks framework also increases its acceptability in diverse kinds of school systems.

Furthermore, because the program is not a schoolwide restructuring intervention with significant professional development components, it should be considerably less expensive to implement than programs such as Success for All or the Literacy Collaborative.

Summary: Program Limitations

The Four-Blocks framework does not have a standard professional development component. Without this component, there may be inconsistent implementation of the program across schools. Variability in professional development features may create inconsistency in teachers' implementation of the program.

In addition, the lack of a standard parent component limits the generalization and reinforcement of the skills taught in the Four Blocks. Allowing individual schools to determine the details of these components might result in inconsistent parental involvement.

National Contact Information

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http://www.wfu.edu/~cunningh/fourblocks/

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Literacy Collaborative

(formerly known as Early Literacy Learning Initiative [ELLI])

Early Literacy Intervention Program Summary

—By Jeffrey Bardzell

Program Summary

The Literacy Collaborative is a schoolwide restructuring model that focuses on classroom-based instruction, depending on Reading Recovery as a "safety net" for those students still not succeeding.

It was originally developed to respond to the problem of successfully discharged Reading Recovery students not receiving appropriate support in the classrooms when they returned.

Self-described as a professional development program, the intervention involves the whole school—especially teachers and families—in a comprehensive and reflective approach to literacy instruction, which is appropriate for all children.

Targeted Literacy Outcomes

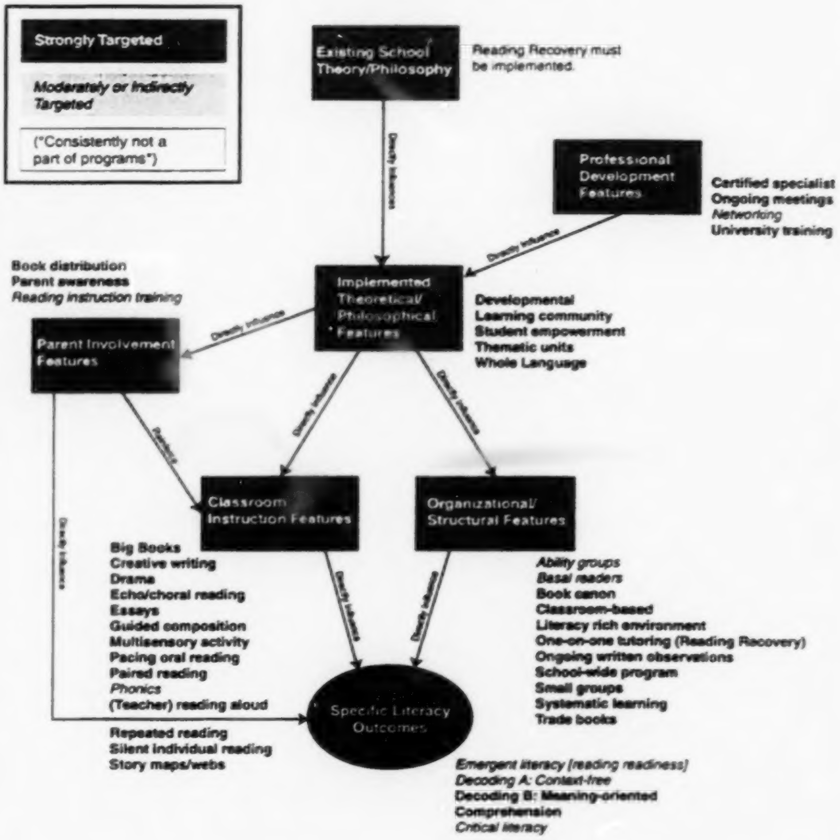
A comprehensive schoolwide intervention (see figure), the Literacy Collaborative was designed to influence all of the reading outcomes. However, consistent with Reading Recovery, the Literacy Collaborative emphasizes meaning-oriented reading instruction. The program is clearly designed around two reading outcomes: meaning-oriented decoding (or decoding B) and comprehension.

It would be false, however, to say that the other three outcomes are not substantially targeted. Several elements emphasize emergent literacy, context-free decoding (or decoding A), and criticial literacy.

However, these outcomes are targeted in a way that makes them consistent with yet subordinate to the two main outcomes. Emergent literacy is targeted in meaning-oriented ways; context-free decoding takes place in the writing component; and critical literacy is the intended result of the meaning-driven activities.

Program Description

Literacy Collaborative Program Features


Strongly Targeted
Moderately or Indirectly Targeted
("Consistently not a part of programs")
Existing School Theory/Philosophy
Reading Recovery must be implemented.
Directly influences
Professional Development Features
Certified specialist
Ongoing meetings
Networking
University training
Directly influence
Implemented Theoretical/ Philosophical Features
Developmental
Learning community
Student empowerment
Thematic units
Whole Language
Book distribution
Parent awareness
Reading instruction training
Directly influence
Parent Involvement Features
Directly influence
Directly influence
Classroom Instruction Features
Organizational/ Structural Features
Big Books
Creative writing
Drama
Echo/choral reading
Essays
Guided composition
Multisensory activity
Pacing oral reading
Paired reading
Phonics
(Teacher) reading aloud
Repeated reading
Silent individual reading
Story maps/webs
Ability groups
Basal readers
Book canon
Classroom-based
Literacy rich environment
One-on-one tutoring (Reading Recovery)
Ongoing written observations
School-wide program
Small groups
Systematic learning
Trade books
Directly influence
Directly influence
Directly influence
Specific Literacy Outcomes
Emergent literacy [reading readiness]
Decoding A: Context-free
Decoding B: Meaning-oriented
Comprehension
Critical literacy

The Literacy Collaborative is a comprehensive schoolwide restructuring model. It is designed to affect a comprehensive set of reading outcomes. It follows Reading Recovery in combining a comprehensive diversified approach to meaning-oriented reading instruction with a sophisticated philosophical base for the whole school. To support the implementation of a philosophically rich program, Literacy Collaborative makes full use of parent involvement and professional development. Inside the classroom, the program balances reading and writing activities in a range of settings—one-on-one, small groups, ability groups, and classwide—to ensure that all children succeed.

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A significant element of the Literacy Collaborative is its literacy framework, which includes eight elements: four each for reading and writing. It is within these elements that the program designers explain most of the program's features.

Organizational/Structural Features

The classroom-based orientation is given additional flexibility through the use of small groups, ability groups, and the use of one-on-one Reading Recovery instruction for those students still not succeeding.

The classroom's literacy rich environment reflects the centrality of the meaning-orientation in the intervention. So, too, does the high reliance on trade books. Trade books allow for greater self-selection than do traditional basal readers.

Two features, however, balance the self-selected reading emphasis: many of the trade books come from a master list (book canon) that the Literacy Collaborative provides, and these books are graded and levelled by difficulty. In addition, the intervention also makes use of basal readers.

Ongoing written observations enable teachers to monitor student progress and provide evidence of program effectiveness. As with other research-oriented interventions (e.g., Success For All), the Literacy Collaborative is designed to close the loop between intended outcomes and actual effects assessed empirically.

Classroom Instruction Features

As with other schoolwide reforms and classroom based interventions, the Literacy Collaborative uses a great variety of instructional features in concert to reach every child.

Most of the features—Big Books, choral/echo reading, creative writing, drama, essays, guided composition, paired reading, (teacher) reading aloud, silent individual reading, and story maps/webs—are consistent with the meaning orientation of the intervention and affect meaning-oriented decoding (Decoding B) and comprehension.

At the same time, other features are designed to affect the remaining outcomes, especially context-free decoding (or Decoding A). Among these are phonics, echo/choral reading, guided composition, multisensory activity, pacing oral reading, and repeated reading.

Professional Development Features

The Literacy Collaborative emphasizes the professional development component, albeit to a lesser degree than Reading Recovery.

As with Reading Recovery, the program uses a university-certified literacy coordinator, who maintains a connection to the university (Purdue University for schools in Indiana) throughout the process.

The Literacy Collaborative also has ongoing professional development for staff and includes networking.

Parent Involvement Features

Parent involvement is also a priority in the Literacy Collaborative model. Parents are encouraged to come into the school to see how their children are learning. This participation constitutes a kind of hands-on reading instruction training. It is also a way of keeping parents aware of what is going on in school.

At home, parents use inexpensive "KEEP" books distributed by teachers to read with their children.

Research Base

The Literacy Collaborative is a relatively new program and has not had sufficient time to develop a solid research base.

The program design appears to be set up so that it will collect sufficient data to determine its success. In addition, the program's methodology in its preliminary research appears sound. That schools will be in collaboration with universities to help analyze the data is also encouraging.

Summary: Program Strengths

For schools that use Reading Recovery, the Literacy Collaborative is a schoolwide restructuring process that is deeply consonant with Reading Recovery. In conjunction, the two interventions should reach all students as they learn to read.

Its instructional framework, parent involvement, and professional development are all cohesively integrated. If schools are interested in seeing a meaning-oriented literacy instruction model, the Literacy Collaborative's design is exemplary.

The university liaison gives schools access to the latest in reading research. In addition, it helps ensure consistency of implementation. Finally, universities should be well equipped for the sophisticated analysis and interpretation of data, which should help the Literacy Collaborative both document its successes and determine its limitations.

Summary: Program Limitations

The primary limitation of Literacy Collaborative is its lack of a research base. While its design appears well conceived, there are no data to document its success or suggest areas where modification may be appropriate.

As with any schoolwide restructuring model, the successful implementation of the Literacy Collaborative depends on teacher buy-in. While the intervention is balanced in the sense that it incorporates both phonics and a meaning-oriented emphasis, the Literacy Collaborative places a higher priority on meaning-oriented decoding and comprehension than it does on phonics and context-free decoding. Phonics-oriented schools may have a hard time adjusting.

Finally, because it depends on Reading Recovery to reach the students most at risk of not learning to read, schools with fairly limited numbers of these students may benefit more than schools with higher percentages of students in at-risk situations, simply because of the cost.

Indiana Contact Information

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Success For All

Early Literacy Intervention Program Summary

—*By Jeffrey Bardzell*

Program Summary

Success For All is a comprehensive school restructuring process designed for schools with large at-risk populations.

Success For All balances a skills-oriented instructional approach with a heavy emphasis on collaboration and teamwork among educators. It is a systematic intervention, with the structures explicitly in place, although teachers and schools have the opportunity to fill in the many gaps.

Targeted Literacy Outcomes

Success For All is a schoolwide reform model, and as such its intended outcomes are diverse and comprehensive. Its stated goal is to ensure that all children succeed the first time. In the same vein, it aims to reduce retentions and referrals to special education.

Because it includes kindergarten (in some cases a full-day kindergarten) and provides systematic coverage of a broad range of reading skills in grades 1–3, the program is designed to affect emergent literacy, both types of decoding (context-free and meaning-oriented), and comprehension.

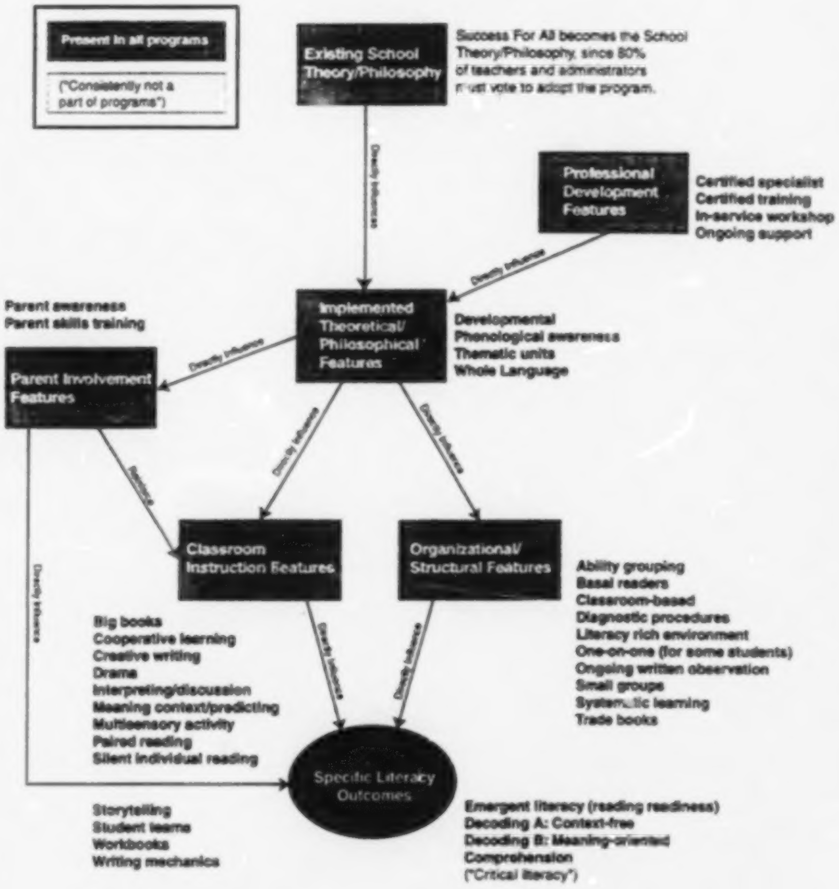
The program appears to have little in place to foster critical literacy, which is the interaction between comprehension of new content and metacognition, or the ability to organize and think about new ideas learned through reading.

Program Description

Among the reading interventions the Policy Center has studied, Success For All is the most comprehensive program available (see figure at right).

This comprehensiveness has important implications. Schools must fully embrace the program, which is prepackaged at the national level. They must be willing and able to go through the training required to implement the program and to make it work in their local settings. If

Success For All Program Features


Present in all programs
("Consistently not a part of programs")
Existing School Theory/Philosophy
Success For All becomes the School Theory/Philosophy, since 80% of teachers and administrators must vote to adopt the program.
Directly influences
Professional Development Features
Certified specialist
Certified training
In-service workshop
Ongoing support
Directly influences
Parent awareness
Parent skills training
Implemented Theoretical/ Philosophical Features
Developmental
Phonological awareness
Thematic units
Whole Language
Directly influences
Parent Involvement Features
Directly influences
Directly influences
Directly influences
Classroom Instruction Features
Organizational/ Structural Features
Ability grouping
Basal readers
Classroom-based
Diagnostic procedures
Literacy rich environment
One-on-one (for some students)
Ongoing written observation
Small groups
Systematic learning
Trade books
Big books
Cooperative learning
Creative writing
Drama
Interpreting/discussion
Meaning context/predicting
Multisensory activity
Paired reading
Silent individual reading
Directly influences
Directly influences
Specific Literacy Outcomes
Storytelling
Student teams
Workbooks
Writing mechanics
Emergent literacy (reading readiness)
Decoding A: Context-free
Decoding B: Meaning-oriented
Comprehension
("Critical literacy")

Success For All takes a comprehensive approach to reading instruction. A school restructuring model, it provides a curriculum complete with methods, materials, professional development, and a parent outreach program. The program has features designed to address every aspect of teaching elementary school children to read. It includes abundant instructional features supported by a great variety of structural features (e.g., small group instruction, diagnostics, measurement instruments, and basal readers). It is much more than a textbook adoption, with a sophisticated philosophical base and the means to help teachers implement that philosophy through instruction. The program even takes over the exisiting school philosophy and becomes the school culture. The advantage of Success For All's careful and comprehensive design may also be its greatest disadvantage, as some feel that it is too prescriptive. However, for schools with high percentages of students at risk, Success For All provides a tool for meeting their needs.

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schools make that investment and implement the design, the program will look as follows.

Organizational/Structural Features

The numerous structural features of Success For All enable the systematic coverage of a broad range of activities.

The small groups and ability grouping structures are designed to enable teachers to provide special customized instruction without relying too heavily on one-on-one instruction. One-on-one instruction is available, however, during first grade for those students struggling to succeed.

The literacy rich environment and trade books are included to foster a love of reading and to provide a meaning-oriented component that supplements some of the skills-oriented activities that are often used in context with basal readers.

Children in the program are carefully monitored with ongoing written observations, and regularly tested using diagnostic procedures so that the school communities know how effective they are.

Classroom Instruction Features

Too numerous to discuss fully, the features in this category range from workbooks and drills to creative writing and drama. Success For All is clearly designed with the idea that a great variety of activities is needed to ensure near-universal success. Accordingly, meaning-oriented and phonics-oriented instructional features are combined.

As a part of its intent to reach every child, the features also include multisensory approaches and an emphasis on writing. The idea is to keep children constantly engaged in literacy activities.

The lessons themselves are broken into short segments of 5–10 minutes each. Cooperative learning strategies are prevalent throughout the activities.

Professional Development Features

Professional development in Success For All is multi-tiered and ongoing. Certified specialists play a key role in getting the intervention initially implemented, and Success For All regularly sends specialists to evaluate implementations.

Ongoing certified training is available, as are national and regional conferences and workshops, in-service workshops, and regular staff meetings.

Parent Involvement Features

Success For All gets the parents involved as well, which is consistent with its emphasis on collaboration. Parents receive training in reading to their children and in many cases the support of social services. The intervention also keeps parents aware of activities, subjects, and instructional methods going on in school.

Research Base

With sites throughout the country and an integrated data collection component, Success For All has demonstrated impact in many schools.

It is particularly strong with the students most at risk of not succeeding in school. These students consistently show significant gains in context-free decoding and comprehension.

One concern is its effects on those students *not* in at-risk situations. Published studies suggest that gains for students not at risk are not as strong as those for at-risk students. Questions also remain about the long-term effectiveness of Success For All.

Nonetheless, the research indicates that Success For All is an effective intervention, especially in schools with high percentages of students in at-risk situations.

Summary: Program Strengths

For schools that have very high percentages of students at risk of not learning to read, a one-on-one pullout intervention may not be able to reach sufficient numbers of children. In such situations, a coherent classroom-wide approach is important. While other classwide interventions exist—e.g., Four-Block Method and Literacy Collaborative (formerly known as ELLI)—Success For All is the only intervention explicitly designed for such schools.

Success For All has a comprehensive and coherent design, with ample structures in place to ensure its success: professional development, ongoing student assessment, and regular site evaluations.

The intervention is varied enough in its methods that all students, no matter how varied their individual needs, strengths, and weaknesses, should have ample opportunities to learn.

One positive aspect of Success For All that gets only modest attention is the heavy emphasis it places on cooperative learning, both for students in the classroom and for the teachers. This emphasis should help students move beyond the skills taught in the lessons into authentic meaning- and communication-oriented experiences.

Summary: Program Limitations

Because it is a comprehensive schoolwide restructuring model, Success For All is expensive. Schools that implement it have a monumental task of preparation, including training, materials acquisitions, and embracing new philosophical approaches.

Success For All's philosophical approaches themselves are not without controversy. Some critics complain that it is too skills-oriented. Many teachers may not accept this emphasis. For it to be effective, Success For All requires a substantial teacher buy-in. One reason for this resistance is that lesson plans are partially (though not completely) pre-determined at the national level.

Some researchers continue to question the intervention's long-term effectiveness, especially for those students who are not in at-risk situations.

National Contact Information

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1-800-548-4998

About the Indiana Education Policy Center

The Center provides nonpartisan information and research on education issues to Indiana policymakers and other education stakeholders to improve education.

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Parent-Child Home Program

Early Literacy Intervention Program Summary

—By Kim Manoil and Jeffrey Bardzell

Program Summary

The Parent-Child Home Program [PCHP] is a voluntary, home-based, two-year program designed to enhance the cognitive development of low-income, at-risk 2–4 year-old children. It aims to prevent educational disadvantage from occurring by targeting emergent literacy/school readiness by increasing appropriate interaction between children and their parents.

The foundation of the program is to provide families with bi-weekly exposure to home-based stimulations (usually a book or a toy) in which trained paraprofessionals, called "home visitors," model appropriate verbal interaction and educational play.

Targeted Literacy Outcomes

The Parent-Child Home Program targets a very specific audience: 2–4 year-olds. Consequently, the intended educational outcomes of the program include emergent literacy and school readiness.

PCHP's short-term goal is to provide cognitive enrichment and enhancement of a child's conceptual and social-emotional development during the years of early language development. The long-term goal of these interactions is preparation for school and prevention of later school problems.

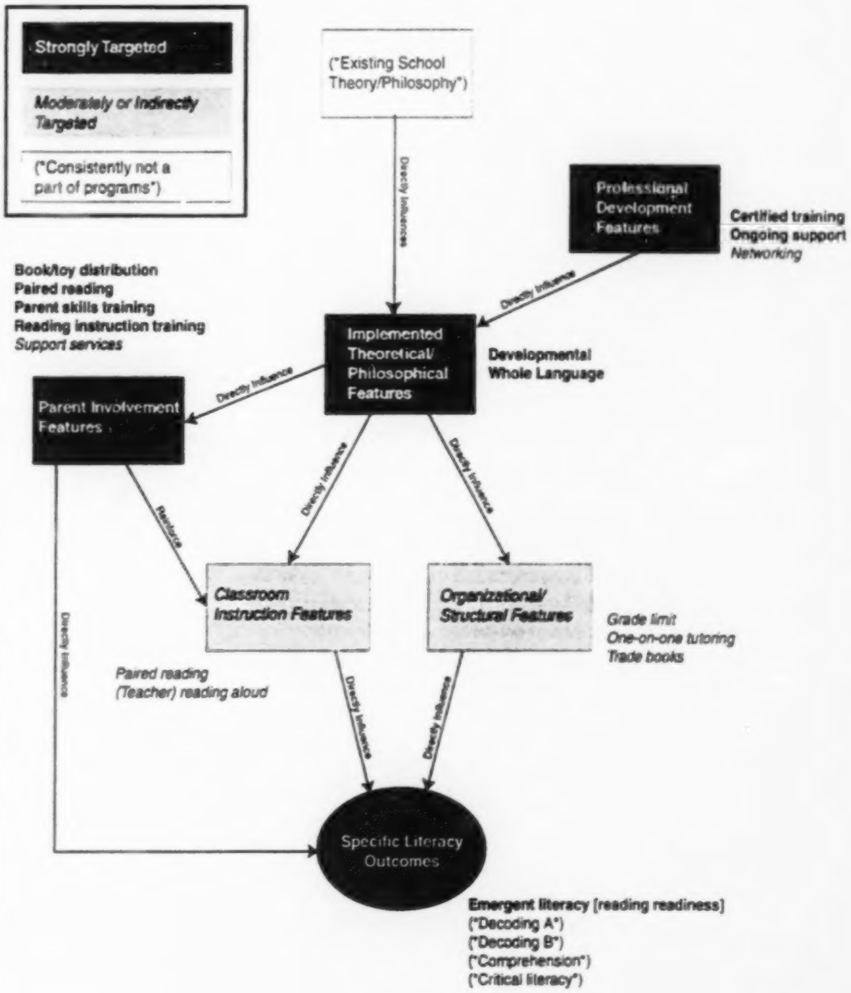
Program Description

The Parent-Child Home Program is organized around home-based parent-child interactions (see figure).

Organizational/Structural Features

The Parent-Child Home Program's organizational and structural features reflect its specific audience and purpose. The program is limited to at-risk preschool children. The program consists of twice weekly, half-hour home visits by a trained home visitor. This home visitor models, without directly teaching, verbal interaction between parent and child, in one-on-

Parent-Child Home Program Features


Strongly Targeted
Moderately or Indirectly Targeted
("Consistently not a part of programs")
("Existing School Theory/Philosophy")
Directly influences
Professional Development Features
Certified training
Ongoing support
Networking
Directly influence
Book/toy distribution
Paired reading
Parent skills training
Reading instruction training
Support services
Implemented Theoretical/ Philosophical Features
Developmental
Whole Language
Directly influence
Parent Involvement Features
Directly influence
Directly influence
Reinforce
Classroom Instruction Features
Organizational/ Structural Features
Grade limit
One-on-one tutoring
Trade books
Directly influence
Paired reading
(Teacher) reading aloud
Directly influence
Directly influence
Specific Literacy Outcomes
Emergent literacy [reading readiness]
("Decoding A")
("Decoding B")
("Comprehension")
("Critical literacy")

The Parent-Child Home Program is a family-oriented preschool intervention. Its primary goals are developmental in nature, and so of the literacy outcomes, it links directly only to emergent literacy. Because it takes place exclusively in homes, it has few classroom instruction features and organizational/structural features. Instead, the program is centered on a philosophy that is developmental and informed by the whole language goal of empowerment. A solid professional development component trains the paraprofessionals who go to the homes, and once there, they model paired reading, reading aloud, and other positive adult-child interactions with books and toys that families may keep and reuse.

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one play sessions, using carefully chosen toys and books. Home visitors also keep anecdotal written records of each session they have with a parent and child.

In-home Instruction Features

The in-home instruction features are spread out among two different weekly sessions. The first session of each week usually introduces the new book or toy. Non-prescriptive guide sheets that contain the curriculum of each visit are used by the home visitors and are also provided to the parents. The guide sheets contain a list of verbal interaction techniques that the home visitor should use in modeling use of the toys and books. These techniques include suggestions on how to read to the child (showing and reading the title page, showing and describing how to turn the pages, reading in a clear voice, asking questions about the illustrations, etc.) and how to play with the child (being reflective and asking questions about their play and how it may relate to their experiences).

The second session reviews these materials. It is expected that the parent will play with the child using the book or toy and master the material throughout the week.

Professional Development Features

The National Center for the Parent-Child Home Program provides training for PCHP Coordinators. The training focuses on conducting home visits, hiring, training, and guiding home visitors, assisting families to access social services, and working with pre-kindergarten and other early childhood programs in the community.

The home visitors themselves are usually unpaid volunteers or paid paraprofessionals. All home visitors are trained in an initial eight-session training workshop and receive ongoing support in weekly conferences with the Coordinator throughout the process. They receive training in techniques necessary to conduct the home visits as well as in ethical standards and respect for families' privacy and ethnic and cultural background.

Furthermore, an annual conference is held for PCHP Coordinators that provides an opportunity for networking and support from colleagues. The conference also provides updates on developments in early childhood education and PCHP research.

New PCHP sites are reviewed after two years of operation and certified as authentic PCHP replications. Brief forms are completed annually to display the PCHP's adherence to the national center's standards.

Parent Involvement Features

The feature category with the greatest emphasis in the Parent-Child Home Program is its parent involvement component. The essence of the program is to increase verbal interactions between the parent and child through modeling of parenting techniques that enhance the learning environment at home. Such techniques include the appropriate use of books and toys in educational play to stimulate children's desire for learning, how to show verbal affection and approval of the child, and how to converse with the child. This modeling is conducted to encourage parents to increase their positive interactions with their children. The books and toys that are used by the home visitor are given to the families to encourage similar interactions between child and parent when the home visitor is not present.

Support services may also be provided to the families involved in PCHP through assistance in accessing resources in the community that may be available to them.

Research Base

There are over 20 years of research on PCHP. This research base demonstrates the effectiveness of PCHP in a variety of areas, although there are some inconsistencies that may need to be looked at more closely.

Overall, the research suggests that PCHP parents develop high verbal responsiveness that continues throughout their child's school years. Such responsiveness has shown to correlate with a variety of short-term school readiness and long-term school performance outcomes including increased scores in reading, math, task orientation, self-confidence, social responsibility and IQ. There is also evidence that PCHP participants ultimately graduate from high school at higher rates than similar children who did not participate in the program.

Summary: Program Strengths

The Parent-Child Home Program is a community-based intervention designed to be a tool in helping break the poverty cycle. It better enables the public educational system to prepare all children for lifelong sucess.

By providing materials and focusing on empowering parents, PCHP increases the generalization of the skills acquired to parent-child interactions throughout a child's life.

In addition, PCHP has several features that illustrate the program's emphasis on and respect for the integrity of the family unit. Sessions take place in homes at families' convenience. PCHP also respects and incorporates features of families' cultural differences. Furthermore, because there is no direct teaching involved in the sessions, the program should empower parents to experiment and adapt the interactions to meet the needs of their children.

Summary: Program Limitations

The Parent-Child Home Program, in spite of its literacy-related emphasis, is a developmental preschool program. It is designed to build a foundation for later schooling, but it is not designed to directly affect literacy outcomes and is not a substitute for a balanced and comprehensive reading program in kindergarten and elementary school. Rather, it prepares the children most at-risk of not achieving to succeed in school.

In spite of its use of volunteers and paraprofessionals, the costs of the program can be as high as $1,200 per parent-child dyad per year. These costs could limit the number of families reached by the program.

National Contact Information

The Parent-Child Home Program
585 Plandome Road, Suite 105B
Manhasset, NY 11030

About the Indiana Education Policy Center

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Indiana Education Policy Center

Reading Recovery

Early Literacy Intervention Program Summary

—By Jeffrey Bardzell

Program Summary

Reading Recovery is a pullout, one-on-one reading intervention for the lowest achieving 20% of students in the first grade.

The program is designed to bring those students back to grade level. To do so, the intervention helps children make the difficult transition from decoding to comprehension.

Targeted Literacy Outcomes

Reading Recovery targets a very specific audience within a defined period of time. For this reason, Reading Recovery deliberately excludes the reading outcomes that are most affected before and after the first grade.

The result is a program entirely aimed at the first grade outcomes of decoding and comprehension. Specifically, the intervention helps children develop strategies to cross the gap between context-free decoding (including phonics) and comprehension in the most robust sense of actually understanding full texts.

The program identifies an intermediate reading outcome, a reconception of decoding. This outcome is meaning-oriented decoding (decoding B), and it is understood as a network of strategies (phonics, semantic, syntactic) used in concert for "meaning-getting."

By preventing an over-reliance on a limited number of strategies, the intervention improves reading comprehension even as it motivates children to read more.

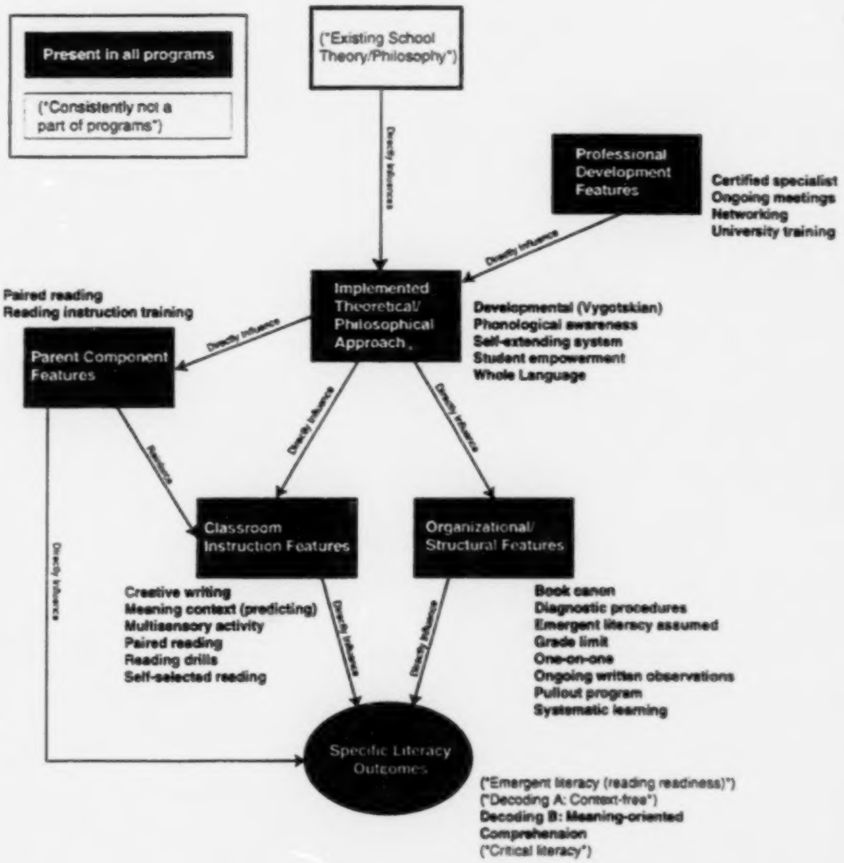
Program Description

Reading Recovery is a comprehensive and cohesive reading intervention (see figure). Program features are described in more detail below.

Organizational/Structural Features

Reading Recovery's organizational and structural features reflect its audience and purpose. Limited to first grade, it takes emergent literacy for granted

Reading Recovery Program Features


Present in all programs
("Consistently not a part of programs")
("Existing School Theory/Philosophy")
Directly influences
Professional Development Features
Certified specialist
Ongoing meetings
Networking
University training
Directly influence
Implemented Theoretical/ Philosophical Approach
Developmental (Vygotskian)
Phonological awareness
Self-extending system
Student empowerment
Whole Language
Paired reading
Reading instruction training
Directly influence
Parent Component Features
Directly influence
Directly influence
Classroom Instruction Features
Organizational/ Structural Features
Creative writing
Meaning context (predicting)
Multisensory activity
Paired reading
Reading drills
Self-selected reading
Book canon
Diagnostic procedures
Emergent literacy assumed
Grade limit
One-on-one
Ongoing written observations
Pullout program
Systematic learning
Directly influence
Directly influence
Directly influence
Specific Literacy Outcomes
("Emergent literacy (reading readiness)")
("Decoding A: Context-free")
Decoding B: Meaning-oriented
Comprehension
("Critical literacy")

Reading Recovery takes a comprehensive approach to reading instruction. Its strong and diverse theoretical base is supported by a sophisticated professional development component and receives constant feedback via a well developed set of diagnostic procedures. The reading instruction itself is made possible by structural changes—i.e., one-on-one, pullout, book canon—which are also replicated to an extent in the homes. Reading Recovery's design is not only comprehensive by including features from all categories, but it is also coherent, in that the features in different categories support each other.

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(knowledge of letters and the alphabet, narrative and non-narrative structures, etc.).

Children are pulled out of their classroom environments and meet with trained Reading Recovery teachers one-on-one. The teachers use extensive ongoing diagnostic procedures to understand precisely how each individual child is reading, identifying areas of strategic weakness.

Then, the teacher and child work together to develop a broader spectrum of successful reading strategies. This program is systematic, in that there is a well defined course plan. Most children complete the course in 12–16 weeks, though there is no set time limit.

Classroom Instruction Features

Each lesson is divided into seven parts. These activities, lasting approximately 5 minutes each, are designed to reflect the complexity of the reading experience and to provide practice in all aspects.

The activities involve creative writing, using context to predict, multisensory activities, paired reading, reading drills, and self-selected reading. Phonics is also taught, using magnetic letters to analyze words and to create new ones.

The instructional features, though they include phonics, are geared primarily to the meaning of the texts.

Professional Development Features

One of the most highly praised aspects of the Reading Recovery design is its professional development component.

With its sophisticated theoretical base—including its reconception of decoding—and its widespread implementation, Reading Recovery poses several challenges to schools attempting to implement it consistently.

For these reasons, Reading Recovery builds in a multi-level system of professional development. Teachers are trained by certified Reading Recovery trainers, who must complete their certification at a specified university (Purdue University for schools in Indiana).

After initial training, Reading Recovery teachers have ongoing meetings, with observations and networking with other Reading Recovery schools built into the process.

Parent Involvement Features

The reading activities used in the intervention are replicated in the home.

Parents are encouraged to come to school and observe Reading Recovery lessons. They are given training in helping their children learn to read in ways consistent with the program.

Once home, the parents and children do paired reading activities.

Research Base

One of the most widely replicated reading interventions in the country (and even internationally), Reading Recovery has a substantial and growing research base.

There is strong evidence showing significant gains in first grade reading scores. In addition, some studies have found significant reductions in retention and referrals to special education.

Some research has questioned the long-term effectiveness of the intervention (see "Summary: Program Limitations" below).

Summary: Program Strengths

Reading Recovery is a well designed early intervention that heavily targets a particular moment in the learning process: when children transition from simple decoding to meaningful comprehension. Research shows that Reading Recovery is highly successful in helping children through this transition.

In addition, its approach to professional development is exemplary. Its professional development component ensures that teachers are well equipped to work with students most at risk of not learning to read.

In addition, it helps with consistency in program implementation, and also doubtless will also have long-term positive effects in schools as teachers continue to participate in a learning environment that exposes them to innovations in reading instruction.

Summary: Program Limitations

Reading Recovery is not designed to be, by itself, all a child needs to learn to read. It was set up to address a specific and often troublesome part of that process, which overall takes years to learn. Thus the schools that implement it are still entirely responsible for helping children with emergent literacy and later outcomes, such as reading for content (e.g., a history book) and critical literacy.

The findings that Reading Recovery's gains are not maintained are also troubling. One likely problem is an incompatibility between methods and materials in the program and those used by the regular school. It is crucial for schools to support the children who complete Reading Recovery.

Reading Recovery is also more costly than other interventions. These costs limit the number of children the intervention can reach.

Indiana Contact Information

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West Lafayette, IN 47907-1442
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About the Indiana Education Policy Center

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APPENDIX E

POLICY NEWS AND NOTES

Indiana
Education
Policy Center
at Indiana University

policy news & notes

Vol. 8 No. 1—Spring 1999

... providing nonpartisan information and research on education issues to Indiana policymakers and other education stakeholders to improve education.

EARLY READING INTERVENTION AND KINDERGARTEN CHANGES LEAD DEPARTMENT OF EDUCATION'S LEGISLATIVE PROPOSALS

Letter from Suellen Reed, Superintendent of Public Instruction, State of Indiana

As we look toward the next millennium, it is with the realization that today's students will be tomorrow's leaders. In order to make certain that our students are as well prepared as possible to meet the challenges they will face, we must do all that we can to provide the best educational opportunities. That means that all students must know how to read well and know how to learn new ways to solve problems by using their minds well.

First we will look at what we have done and what we hope to do in helping Hoosier students prepare themselves to be lifelong readers. The Indiana Department of Education took positive steps in 1997 toward building a successful future for our students in this important area—reading. Media specialists and librarians from many different parts of the state are telling us that the1997 Reading and Literacy Initiative for a Better Indiana is having a great impact in media centers and classrooms.

The Indiana Education Policy Center is involved in an evaluation of the program that will monitor and measure the progress of this lit-

["Early," continued on page 2]

IMPROVING EARLY LITERACY: CRITERIA FOR SUCCESS

"Improving early literacy" has become an important theme at the Indiana Education Policy Center during the past year, as it has in the State of Indiana. In this special issue of *policy news & notes*, we focus on how the research literature can be used to inform schools interested in developing successful early reading interventions.

Last year, the Policy Center conducted a study of the implementation of the Indiana Department of Education's Early Literacy Intervention Grant Program. The study examined the research base for selected early reading programs and examined the features of implemented programs. We consulted several national experts to find programs with a substantial research base. Based on this review, we identified three criteria that should be met if a reading intervention is to have a high probability of success.

Criterion 1: Recognize the complexity of reading acquisition

Reading acquisition involves a set of interrelated skills: emergent literacy, context-free decoding, meaning-oriented decoding, comprehension, and critical literacy. All of these skills must be acquired by 4th grade, if students are going to meet the goal of reading comprehension across subjects.

When designing an early reading intervention—or when selecting an approach from among those that al-

["Improving," continued on page 3]

Special Thematic Issue: Early Literacy Intervention

This is a special issue of **policy news & notes**, *which focuses on the theme of early literacy intervention.*

Inside are four articles that discuss different aspects of the theme and what research indicates about it.

For more information on early literacy intervention in Indiana, see our full report, **Indiana's Early Literacy Intervention Grant Program Implementation Study.**

In addition, the Center will publish a series of newsletters and reports throughout this year, which will be available at the Center upon publication. For questions and orders, call (812) 855-1240.

["Early," continued from page 1]

eracy endeavor. According to early reports, in terms of investment and return, we have made an excellent start. We would like to see this high-return investment in Indiana's future continued. The following is a brief summary of programs that focus on early literacy improvement.

Early Intervention Programs

One of the most popular early intervention programs is Reading Recovery. This program identifies and gives special tutoring from well trained teachers to first graders who are at risk of not learning to read. By the end of the 1997–1998 biennium, 38 teacher leaders and 785 teachers will have been trained in the Reading Recovery program. This means that during the 1999–2000 school year, nearly 6,280 Grade 1 students will have been reached by this intensive, one-on-one program.

In addition to Reading Recovery, 111 other early intervention projects were funded to help struggling early readers. These projects were backed by research, and an evaluation process was included to judge progress. Local school districts received financial assistance and program implementation flexibility to address local literacy needs through proven early intervention methods and programs.

The goals for the next biennium are to expand the availability of the Reading Recovery program in more areas of the state and to increase the number of trained teacher leaders and Reading Recovery classroom teachers, thereby increasing the number of students served in the program. Continued support also will be made available to school corporations that want to implement or continue with other types of early intervention programs that fit the criteria above.

Buying Library Books and Newspapers

As a part of the 1997 Initiative, the Indiana General Assembly set aside $4 million for the purchase of library books and newspapers for public schools serving Grades K–8. This grant provides funds to match local funds that have been appropriated for this purpose. The new books, provided in addition to those purchased with local school corporation funds, account for about two percent of collections in K–8 school libraries. Yet circulation increased 10 percent. The Middle Grades Reading Network estimates that 226,015 more books were purchased in the 1997–98 school year than in the previous year.

The goals established for the next biennium for the Library Printed Materials Grant are to continue to support the efforts of school corporations to replenish their libraries. Research shows that students need good materials for academic and leisure reading because it helps students form a lifelong habit of reading. The impact of independent reading on student academic achievement has been well documented. We know, too, that the more children read, the better they read.

Optional Full-Day Kindergarten

The Indiana Department of Education is also asking for legislation and funds to provide optional full-day kindergarten. This will offer school corporations an opportunity to expand effective early-education experiences.

Why Full-Day Kindergarten?

Research has shown that quality full-day kindergarten programs can result in academic and social benefits for children (see "Research on Full-Day Kindergarten Effectiveness" on page 6). In addition, scientists have found that the first 10–12 years of life are the most significant in terms of brain development.

For many Indiana children, kindergarten is the first opportunity they have for the kind of essential early education experiences necessary for this development. While many children benefit from stimulating home environments, other children lack vital opportunities in the early years. While there are costs associated with early childhood education, they are outweighed by long-term benefits.

Costs Of Implementation

Implementing optional full-day kindergarten will give school corporations more tools with which to deliver effective early education opportunities. Any full-day kindergarten policy adopted by the legislature should ensure that parents have the option to enroll their children, and schools have an option of when, and if, they make a transition to full-day programming. Research on full-day kindergarten programs strongly supports the benefits of this policy. Children in full-day programs tend to exhibit more positive behaviors than pupils in half-day or alternate-day programs. Researchers have found a positive relationship between participation in full-day kindergarten and later school performance, especially in first grade.

Changing the Kindergarten Entrance Date

The General Assembly is being encouraged to change the kindergarten entrance date because Indiana has, by far, the earliest date in the nation: June 1. That means thousands of children are not eligible for kindergarten until they are six years old. The next closest state is Missouri with an August 1 date. Twenty-four states have an enrollment date established in the month of September. Indiana law leaves many five-year-olds with nowhere to go for quality education experiences. While some of these children have a stay-at-home parent, most spend their days in other child-care arrangements.

Most importantly, the current entrance law takes away a year of vital experiences for these young children. Having disadvantaged children spend an extra year in less than stimulating environments likely will put them even farther behind their peers who have access to quality education.

The Wonder Years of Learning

Research shows that a child's earliest years are the most critical in terms of brain development. National early childhood experts have encouraged the date change and describe Indiana's current Kindergarten Entrance Law as the approach not to be taken. These are the wonder years of learning, and we must not waste this window of opportunity for learning.

The Indiana State Board of Education states that "the Kindergarten curriculum shall include developmentally appropriate activities" in all areas of instruction (511 IAC 6.1-5-1). It is very important that those of us in leadership positions support this kind of curriculum, instruction, and assessment that best meets the needs of young children.

Changing the entrance date will not force any children to attend school earlier, but will welcome children who turn five in June, July, or August. It is up to parents to make the decision about when to enroll their child. Since kindergarten is not mandatory in Indiana, compulsory education does not begin until the year of the child's seventh birthday.

The Legislative Agenda

These important changes in Indiana law are part of the Indiana Department of Education's legislative agenda. They are introduced on behalf of children and their need for positive educational experiences at an early age.

—Dr. Suellen Reed, Superintendent of Public Instruction, State of Indiana

["Improving," continued from page 1]

ready have a solid research base (see Table 1 on page 5)—it is important to identify the skills that will be addressed by the intervention. Ideally, this choice should be based on the careful study of the students' needs in a school community.

Criterion 2: Use a cohesive approach in the intervention

Reading intervention involves changing a set of interrelated program features. Through a professional development process, teachers learn that new practices can be implemented—thus changing the school, or at least the early reading program.

To be successful—that is, to improve early literacy in ways that are meaningful and measurable—interventions need to integrate different program features in complementary ways. Some early literacy interventions are well designed and already take a cohesive approach. If one of these proven approaches is chosen, then the challenge becomes to implement the intervention well, effecting real change within the school in ways that are intended.

If a school community decides to develop its own approach to early reading intervention, then it can use our "Framework for Planning Early Literacy Interventions" (introduced on page 4) to design its own cohesive approach. It can use the framework to think about how different program features link to the reading outcomes that are of central concern.

Criterion 3: Use an inquiry-based approach

Regardless of the intervention method chosen, the early literacy intervention should use an inquiry-based approach:

- *Analyze the challenge*: Identify the reading challenge that is most crucial in the classroom or school (Criterion 1);
- *Pick a solution that meets the challenge*: Select or design a cohesive approach to meet the challenge (Criterion 2), thinking through the important features of the reading intervention;
- *Develop an action plan*: Define what should be done, how it will be implemented, and when;
- *Pilot test the solution*: Try out the new strategy to find out if it addresses the challenge (treating the interventions as experiments that the school community can learn from);
- *Evaluate and reassess the challenge*: Include an evaluation plan. At the very least, teachers responsible for the intervention need a good way to monitor the progress of students served by the intervention. Consider whether the students are acquiring the targeted reading skills associated with the intervention (i.e., the challenge).

Some early reading interventions already include features that meet the three criteria. All of the interventions we list in Table 1 meet at least the first two criteria. Some also include an inquiry-based approach. For example, Reading Recovery integrates a proven approach to monitoring the progress of students. Regardless of which intervention strategy your school community chooses, be sure to monitor progress and use this information to make refinements in the intervention.

If a school chooses to design its own early reading strategy, then it is especially important to include the inquiry component. In some types of interventions, it is necessary for a school community to develop its own approach. For example, in full-day kindergarten there are no predefined approaches supported by well-documented research. Instead, school communities should develop their own plans based on an understanding of the research literature and best practices.

["Improving," continued on page 8]

A FRAMEWORK FOR PLANNING EARLY LITERACY INTERVENTIONS

As a part of its ongoing study of Indiana's Early Literacy Intervention Program, the Center is conducting a comprehensive review of the literature on early intervention. The literature is as diverse as the programs themselves. Thus, our challenge has been to synthesize the research to help school communities make informed decisions about the design of literacy programs.

The Center developed the "Framework for Planning Literacy Interventions" to help schools develop intervention plans. This framework breaks interventions down into components and allows consideration of these components in relation to a diverse set of literacy outcomes.

The program components, or "program features," are organized into five major "feature categories," which occur between the school's existing philosophy and specific literacy outcomes (see Figure 1). Early literacy interventions typically include program features related to:

- Implemented philosophy
- Professional development
- Classroom instruction
- Organization or structure
- Parent involvement.

It is important that the features actually included in an early intervention are linked together in a coherent way. School communities may choose an intervention to influence a specific outcome or to address a comprehensive set of outcomes. We have identified five reading outcomes that are essential for students to have by the end of fourth grade:

- Emergent literacy (reading readiness)
- Context-free decoding (Decoding A)
- Meaning-oriented decoding (Decoding B)
- Comprehension
- Critical literacy.

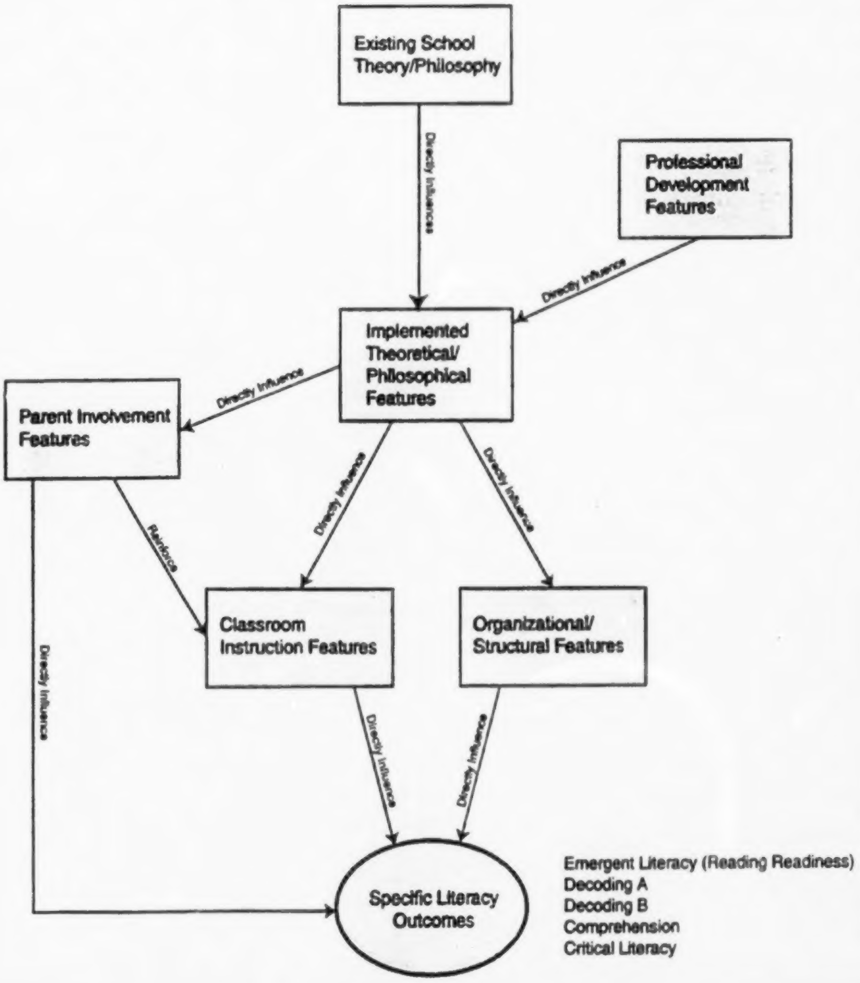
Different reading programs focus on different literacy outcomes.

We used the framework to assess the research base for reading intervention. It can also be used to guide planning for reading intervention.

Identifying Research-Based Interventions

The framework was used for a two-part analysis of the re-

Figure 1
Framework for Planning Early Literacy Interventions


Existing School Theory/Philosophy
Directly Influences
Professional Development Features
Directly Influence
Implemented Theoretical/ Philosophical Features
Directly Influence
Parent Involvement Features
Directly Influence
Directly Influence
Reinforce
Classroom Instruction Features
Organizational/ Structural Features
Directly Influence
Directly Influence
Directly Influence
Specific Literacy Outcomes
Emergent Literacy (Reading Readiness)
Decoding A
Decoding B
Comprehension
Critical Literacy

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search literature. First, we considered the *intended effects* of the intervention: what outcomes was the intervention designed to affect? Second, we analyzed the empirical research, or the *actual effects* of the intervention: which outcomes did the intervention actually affect in real classrooms?

The framework allowed us to assess the *cohesiveness* of different interventions. It also allowed us to see how a diverse set of program features can work together to affect desired reading outcomes. Using it, we were able to identify those resources (e.g., parental involvement features) that interventions were not tapping.

The model also helped us identify the outcomes an intervention is not designed or likely to affect, which is important since no intervention will affect all outcomes for everyone. For example, Reading Recovery emphasizes meaning-oriented decoding, while the Four-Block Method affects both decoding outcomes as well as comprehension (see Table 1).

Table I. Side-by-Side Comparison Of Reading Interventions

Name of Intervention	Description	Research Base
Four-Block Method	Program divides reading into four equal blocks of time: phonics, basal instruction, self-selected trade books, and writing	Very little research to date, though preliminary research indicates that students make gains in the areas of context-free and meaning-oriented decoding as well as comprehension
Full-Day Kindergarten	Two strategies: (1) Extends the kindergarten day; (2) Extends the day and includes a curriculum enhancement	(1) Gains made in emergent literacy; (2) Gains made in emergent literacy; Some report gains made in decoding, reduction in referrals to special education and retention
Literacy Collaborative (formerly known as the Early Literacy Learning Initiative [ELLI])	A classroom-wide intervention that focuses on comprehension and meaning-getting; Designed to be the classroom counterpart to Reading Recovery	The program is too new to have a research base; according to our framework, it appears to be of sound design and should affect comprehension and meaning-oriented decoding (B) outcomes
Programmed Tutoring	One-on-one pullout intervention designed in the 1960s; Program features and emphases evolved over time, following an inquiry-based model	The most significant gains were made in the versions that incorporated a balanced approach, focusing both on phonics and on comprehension and context
Reading Recovery	One-on-one pullout intervention for bottom 20%; Focuses on developing strategies for meaning-getting (decoding B) to build a transition between phonological awareness and ccomprehension	Strong gains in first grade reading scores, with most students reading on grade level after intervention; Some debate remains about long-term effectiveness
Success For All	A comprehensive schoolwide restructuring method, involving professional development, classroom restructuring, and a highly structured classroom instructional approach; Supplemented with one-on-one instruction for those students still struggling	Research is very favorable for Success For All, especially for the context-free decoding A and comprehension outcomes; Success For All appears to be most effective for the students most at risk, though other students made fewer gains; research generally supports long-term gains as well, though this finding was not universal

Planning for Intervention

The model can be used as a tool to aid planning for early literacy intervention. When schools decide to undertake an intervention, they can adopt an existing intervention, such as Reading Recovery. Or they can create their own intervention, using the framework to make informed choices about program features.

Our review of the literature on early interventions suggests that interventions and reading programs should meet the following criteria:

- Recognize the complexity of reading acquisition
- Use a cohesive approach in the intervention
- Use an inquiry-based approach.

School communities can use the framework to determine how well packaged interventions meet the first two criteria and how well the selected intervention will fit into their existing school settings. This is especially important when considering promising programs that have yet to develop a solid research base, such as the Literacy Collaborative.

For those schools that opt to design their own interventions, the framework can serve as a tool, enabling them to evaluate the cohesiveness of their designs. In addition, it illuminates how the design features will interact to affect outcomes. For more information on planning for early literacy intervention, see "Improving Early Literacy" on page 1.

—Jeffrey Bardzell, Edward St. John, and Kim Manoil

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RESEARCH ON FULL-DAY KINDERGARTEN EFFECTIVENESS

School communities throughout the United States are experimenting with the concept of full-day kindergarten programs. In Indiana, lawmakers are considering providing funding for optional full-day kindergarten. Lawmakers, educators, and school administrators need to know how to maximize the benefits of this program.

Unfortunately, this kind of information is difficult to acquire: full-day kindergarten is not a single, clearly defined program, and there is substantial variation across locations. Despite these limitations, we can characterize the full-day kindergarten implementations that had the greatest long-term benefits.

Two Approaches to Full-Day Kindergarten

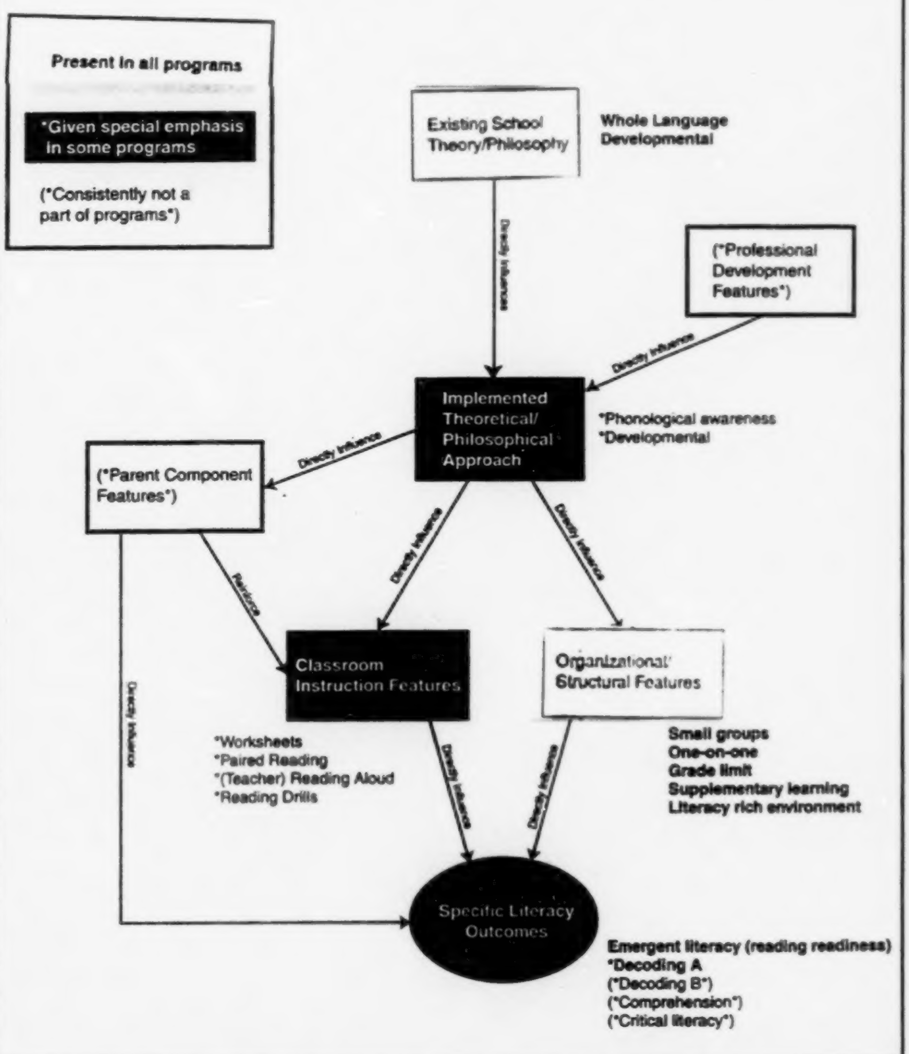
The research literature describes two different types of full-day kindergarten programs: developmentally-oriented programs and programs with embedded curriculum enhancements.

The first type views the extension of the day itself as the vehicle for change. This type is grounded on the developmental view that children benefit from more time in the classroom, and the primary goal is unchanged from that of standard half-day kindergarten: to prepare children for first grade and school life in general.

Most of the full-day kindergarten programs described in the literature appear to be consistent with the first type: programs with a predominantly developmental orientation. The only program features that distinguish these programs from traditional half-day programs are the additional time and any structural changes that come about as a result, e.g., increased small group instruction.

The second type of full-day kindergarten views the extension of the day as an opportunity to implement curricular change. Such changes might include an

Figure 2
Program Features and Intended Outcomes of Full-Day Kindergarten


Present in all programs
*Given special emphasis in some programs
(*Consistently not a part of programs*)
Existing School Theory/Philosophy
Whole Language
Developmental
Directly influences
(*Professional Development Features*)
Directly influence
Implemented Theoretical/ Philosophical Approach
*Phonological awareness
*Developmental
Directly influence
(*Parent Component Features*)
Reinforce
Directly influence
Directly influence
Classroom Instruction Features
Organizational/ Structural Features
*Worksheets
*Paired Reading
*(Teacher) Reading Aloud
*Reading Drills
Small groups
One-on-one
Grade limit
Supplementary learning
Literacy rich environment
Directly influence
Directly influence
Directly influence
Specific Literacy Outcomes
Emergent literacy (reading readiness)
*Decoding A
(*Decoding B*)
(*Comprehension*)
(*Critical literacy*)

enhanced approach to a specific topic, such as math or literacy. In this sense, a full-day kindergarten with an enhanced literacy component can be used as an intervention, in addition to its traditional developmental purpose. Fewer in number, programs using this alternative approach are distinguished not only by structural features, but by philosophical and/or instructional changes to the developmental curriculum as well.

A graphic comparison of the two types of full-day kindergarten programs is depicted in Figure 2. This graphic illustrates the relationship among different types of features and how they relate to intended literacy outcomes.

The first type of full-day kindergarten programs (indicated with the light gray shading of Figure 2) are distinguished from the second-type of full-day kindergarten programs (which, in addition to including the light gray shading, also includes the dark gray shading of Figure 2) that have been documented in the literature.

Most research indicates that full-day kindergarten shows an increase over half-day kindergarten in the area of emergent literacy, or reading readiness. Emergent literacy is a complex outcome, comprising knowledge about print, growing phonemic awareness, and an increasing interest in the literacy experience. However, most studies on this type of program do not consider the sustained impact on literacy achievement in later grades, nor is there a logical reason for this approach to have a sustained effect.

The second type of full-day kindergarten—the curriculum enhancement approach—introduces instructional and philosophical modifications. These programs include a combination of language rich and developmental philosophies along with instruction in phonics or instruction emphasizing phonemic awareness. The extra time allows for a more diverse array of literacy-related activities than is possible in a half day classroom.

For example, the full-day kindergarten program in Evansville, Indiana integrated more diverse instructional strategies, including the following approaches and techniques:

- *Worksheets*, a technique that reinforces direct instruction in phonological awareness
- *Paired reading*, an approach to facilitating reading awareness and the fundamentals of reading that reinforces both the whole language and phonological awareness approaches
- *(Teacher) reading aloud*, in which teachers read to children, a technique that enriches child development and language acquisition
- *Reading drills*, a set of direct instruction techniques that carry forward an emphasis on phonological awareness.

The intended outcomes of the Evansville program included and exceeded the developmental preparation and socialization seen in the first type of full-day kindergarten. Embedded in the program itself was a balanced literacy intervention. In addition to emergent literacy, this program also targeted context-free decoding (the ability to recognize letters and related sounds).

Research on full-day kindergarten programs that make philosophical and instructional modifications also found significant improvement in emergent literacy. In addition, these studies found other gains had been made, although some of the results were mixed (see Table 2).

Studies conducted on the Evansville program revealed that students in this program had higher gains in the area of emergent literacy when compared to students in traditional half-day kindergarten programs. The students in Evansville's full-day

["Full-Day," continued on page 8]

Table 2. Comparison of Two Full-Day Kindergarten Approaches

	Extends School Day	Extends Shool Day and Modifies Curriculum
Targeted Outcomes	Emergent Literacy, Developmental Preparation	Emergent Literacy, Developmental Preparation, Phonemic Awareness and/or academic outcomes
Affected Outcomes According to Empirical Research	Emergent Literacy at end of year (in the majority of studies); few sustained long-term gains	Emergent Literacy at end of year; when phonological instruction was included, there were sustained long-term gains made in decoding and reading comprehension; inconclusive findings for other types of instructional academic programs
Retentions and Referrals to Special Education	No reported change in retentions of referrals to special education	Some studies reported reduction in the number of retentions in subsequent schooling and in the number of placements in special education

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["Full-Day," continued from page 7]

kindergarten program also had higher gains on standardized tests and higher report card scores through seventh grade. In addition, this site also found decreases in retention.

School communities should design their full-day kindergarten programs to include this balanced approach. Also, they should consider supporting these interventions with parent components and appropriate professional development. Evidence of program features in these two feature categories was quite limited in the full-day kindergarten literature, but both types of program features may contribute significantly to the cohesiveness and success of interventions. Examples of parent involvement features and professional development features include:

- Family literacy
- Book distribution
- Paired reading, for the *parent involvement* component; and
- Certified/university training
- Ongoing support
- Networking, for the *professional development* component.

Simply modifying the structure/organization of a kindergarten program by increasing the time available for literacy instruction can improve emergent literacy (or reading readiness) by the end of kindergarten. On the other hand, using the additional program time in a full-day kindergarten program to increase the program's diversity of instructional and philosophical techniques may increase the impact such programs have on long-term literacy achievement.

—By Kim Manoil, Jeffrey Bardzell, and Edward St. John

["Improving," continued from page 3]

Making Good Choices

Educators in schools routinely make choices about curriculum that have a large impact on the learning environments for children and families. It is important that schools consider the type of learning environments they want to create when choosing an early reading intervention strategy or when developing a full-day kindergarten program.

Focusing on student learning—and monitoring student progress in skills that the school community has decided are critical—can help build a culture of quality and care in a school. Focusing on how families learn together and using an inquiry-based approach can help school communities both improve reading and become more caring learning communities.

—Edward St. John and Jeffrey Bardzell

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